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CLOTHILDE SOUPERT AND PINK SOUPERT.

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No. I.

THE SOUPERT ROSES.

THE colored plate of Soupert Roses which appears in the present issue is sent out for the purpose of expressing the important value of these varieties for northern regions where the winters are long and cold. There is a constant demand for everblooming hardy roses, and this demand it is impossible to satisfy when made by dwellers in cold climates, except as it may be done by offering these polyantha-tea varieties.

Clotilde Soupert was originated by Soupert & Notting, of Luxemburg, and sent out in 1890. It is a seedling resulting from a cross of the polyantha variety Mignonette by Madame Damaizin, a tea. Its hardy constitution is inherited from Mignonette, while its constant blooming character comes from its tea parent. The plant is of a dwarf bushy habit, becoming only about fifteen or eighteen inches in height. The flowers are borne more or less in clusters and are produced from early summer until checked by frost in autumn. There is a marked tendency in the plant to bloom at distinct periods, which is a characteristic of the polyantha or *Rosa multiflora*, but this tendency is overcome by its tea relationship to the extent that is in evidence by the appearance of some flowers throughout all the summer and autumn. At the height of the periodic seasons the flowers are produced in immense numbers, literally covering the plants. The flowers are of medium size, globular, full; the petals handsomely imbricated, outer ones pearly white, center a very soft pink; very fragrant, the delicate, pure odor, has been said to be like that of the old June roses.

Pink Soupert is a seedling resulting from a cross of Clotilde Soupert by Lucullus. The latter is a variety of *Rosa semperflorens*, one of a group which William Paul, in the "Rose Garden" calls "The Crimson Chinese Rose." These plants says the same author "produce

a great number and regular succession of flowers throughout the summer and autumn."

The parents of this variety, then, on both sides, possess the everblooming habit. This variety was raised by the famous rose-growers, Dingee & Conard, and was first sent out about 1895. It is a dwarf plant, growth similar to Clotilde Soupert, and the originators say, in their catalogue, that it "is a seedling from Clotilde Soupert, with which it is identical, except in color of flower and foliage. The color is a rich pink; wonderfully free and continuous bloomer."

In these two varieties we have dwarf-growing subjects which we can plant out in our gardens and enjoy their handsome, fragrant bloom from spring until late autumn, and which with little protection can be securely wintered. Of the thousands of varieties of roses now cultivated these are the only ones, unless Mosella, a yellowish variety, and which has been called "Yellow Soupert," is another of which this statement can be made. They can be safely recommended for planting in beds, using both varieties, the pink for the centre and Clotilde for the margin of the bed.

Here is a bit of experience: By the writer's advice a bed of these two varieties was planted in the spring of 1897 within a few rods of the waters of Lake Erie, on the grounds at Lockevan, in Erie county, the country place of Mr. Spencer Kellogg of Buffalo. The plants made a rapid growth and in a few weeks commenced to bloom and continued through the summer and fall. As this was the first season's experience with them, and as the situation was particularly exposed to cold winds and a low temperature there was considerable anxiety in the autumn about their protection for winter. The course taken was this; the bed was boxed all around, some old, rotted manure was then spread among the plants, and the whole was

then covered well with evergreen boughs, and, lastly, a covering of boards in roof fashion, was placed over all. In spring when the coverings were removed it was found that the snugly sheltered bed had been a safe harbor for mice, and these had eaten the plants off entirely to the surface of the ground, and at first it appeared as if the destruction was complete. Such, however, was the vigor of the plants that they soon commenced to push buds just at and below the soil surface, and in a short time the plants were in fine condition, none the worse for the severe pruning. The bloom for the season was very abundant and in every way satisfactory. In the fall of 1898 the bed again received a coating of old manure

and a covering of evergreen boughs and was left in that way for the winter, perhaps one of the most trying ones ever experienced in this country by persons now living. In the spring every plant came out fully alive to the tips of the shoots, and again the past summer, unequalled by the severity of a drought, the bed has been a continuous exhibition of roses.

There is little occasion to say more. These varieties are excellent for pot culture, and if success is ever to attend the window culture of roses in winter it will be found with the Soupert varieties. Our readers who may want hardy everblooming and fragrant roses can be advised in the strongest terms to plant Clotilde Soupert and Pink Soupert. C. W. S.

DAFFODILS AND NARCISSI.

ON fine old estates, where the gardeners as well as the bulbs have been imported, the daffodils and narcissi are loved and appreciated at their true worth and planted by thousands every year. But in the smaller gardens of the multitude of our American people all except a few of the older forms are little known as yet.

It would pay some enterprising bulb merchant to print in pamphlet form for free distribution, or as a supplement to his catalogue, the chapter entitled "When Daffodils Begin to Peer," from Mr. George H. Ellwanger's charming book, "The Garden's Story." An enthusiasm for daffodils among many of my friends may be traced straight to a perusal of it, and that chapter of my own treasured volume has been pored over more than any other.

An enthusiasm for any flower should ensure its close observance and careful culture, not the mere planting in masses by the hundred and the subsequent neglect that is called "naturalizing" by some of our gardeners. I quite agree with them in thinking that daffodils look their loveliest when seen growing in wild masses among the grass, but take a neglected "self-made" flower of the fine old Von Sion, such as is seen blooming determinedly, but dejectedly, about many country yards, and compare it with a great, glowing, golden flower from some clump that has been planted carefully rather deep in some pure, rich soil, and mulched regularly every autumn and see what a difference there is in the two blossoms! And verily it is not the fault of the fine, sturdy old root which is determined to do its best under all conditions.

And why plant great shoals of these Von Sions all by themselves when such lovely contrasts in white, cream and primrose could be planned, all in bulbs just as hardy? Orange and Sulphur Phoenix are both handsome; the first is a richer, the second a more delicate shade of yellow. *N. moschatus* has a lovely pale primrose trumpet that nods itself softly into almost pure white before the blossom fades, so that the older the flower grows the prettier it is almost up to its last stages. This, I think, is the form sometimes catalogued as *N. cernuus*, of which Ellwanger says:—

"In a great vaseful of daffodils before me, *Cernuus*, the drooping white narcissus, is conspicuous, nodding lithely from its fluted stalk. Its sulphur perianth, changing to white, and pale primrose tube, are heightened in their refined effect by its pendulous habit. It is a Spanish flower, and as it cannot wear a mantilla, it coquettishly hangs its lovely head."

My surmise as to the identity of the two may be incorrect, but certain I am that under these two names bulbs producing flowers just alike have been sold me. *N. pallidus præcox*, the first of all to bloom, is also much like *N. moschatus*.

In photographs of yellow flowers it is difficult to secure distinct color values, but those who are at all familiar with the daffies will recognize in the upper flower of the cluster bold glittering *Horsfieldii*, the king of the trumpeters. Empress, its royal consort, has a similar flower, the only difference being that it blooms a few days later, and does not carry its blossoms quite so regally erect. "Each exhales a rich magnolia-like odor; each flutters its pure white perianth and great golden corona over the luxuriant foliage

like some radiant, gaily sailing butterfly."

N. incomparabilis is the second flower of the cluster,—a good *incomparabilis*, not the greenish, degenerate blossom so common about country yards. This has a long-suffering, much-enduring root that lives through much ill treatment, but blossoms out into most vivid orange and yellow when carefully tended.

N. poeticus plenus, or double poet's narcissus, is the third flower, and a truly fine one. I cannot account for the trouble some cultivators record of its buds persistently coming "blind," unless they grow it in too dry and stiff a soil. With me this narcissus has always bloomed well, giving fine, handsome flowers that have sometimes been mistaken for gardenias. My best clumps of it are in a low, sandy stretch of creek land, that is almost always moist even in the heat of a dry summer.

The fourth flower is lovely *Leedsii*, the form called *Circe*, of the tea-cup section, with a perianth that is almost pure white, and a dainty little cup that changes from canary to porcelain white. These pale primrose or white narcissi, have, as Mr. Ellwanger says, a much more refined and high-bred air than the yellow ones, although, of course, not so showy and glittering.

Dainty little *poeticus* with its cool, snow-white corolla, and red-rimmed waxen cup is



A GROUP OF DAFFODILS
photographed by J. Horace McFarland

the lower flower in the cluster, and perhaps the best loved form of any. It is a very hardy little blossom and seems to thrive well with us even under careless treatment.

I have been most successful with narcissi when the bulbs were planted deep in rich, light soil and left undisturbed for a number of years,—three or four at the least. In this way the bulbs grow very large and strong and give extra large and finely colored flowers. We mulch them with fine old fertilizers or very rich soil in fall,—never in spring or summer, as this would start them to growing in the fall.

When the clumps begin to look very thick and the flowers to come thinner and smaller it is time to take them up and replant the bulbs in fresh soil, or at least to dig out some

of the clumps here and there and to fill up the holes with rich, fresh soil.

On a stiff clay soil no daffedil can bloom its best or thrive for very long. Even in sandy loam we usually sprinkle a handful of sharp sand around each bulb as it is planted. Manure in the soil is not good for daffies of any kind if it comes in contact with the bulbs, for it is apt to make them decay at the base. If the soil is not rich enough without fertilizers they are best applied as a mulch after planting the bulbs.

Experts now tell us that American-grown bulbs give finer flowers than imported ones, besides having the advantage of being already acclimated and thoroughly hardy. In this latter respect bulbs grown in the moister, milder climate of Europe often fail. L. GREENLEE.

PRIZES FOR ENGLISH WINDOW GARDENS.

NOT long ago I spent several weeks in summer in the little English village of Ketton, and while there came to know of a pretty custom which it seems to me might be introduced into this country,—that of giving prizes for the most pleasing windows filled with house plants.

The houses in Ketton, like those in all English villages, are built of stone. Many of them were in existence as long ago as when the Pilgrims were coming to this country, and have been lived in ever since. Almost without exception they stand close to the street, for English gardens are behind the houses, or behind high walls, and so the quaint lead-sashed windows are so near the sidewalks that the flowers which fill them show to the best advantage. I had often admired the beautiful displays in Ketton, and wondered at them, until I happened to learn that they had a definite object besides that of ornament.

A small fund had been set aside, some years before, by a wealthy lady, the income to be devoted to giving prizes each year to the possessor of the finest window garden. The sum available for premiums was not large,—as I remember it now two pounds a year, (about ten dollars.) I believe the three prizes were respectively one pound, twelve shillings, and eight shillings. That would be five dollars, three dollars and two dollars. The only restrictions were that no one should compete who had a greenhouse,—small glass houses for forcing are much more common in England than they are here,—that the competition should include only one window in a house, thus putting the occupant of the smallest house on a fair footing with her more prosperous

neighbors, and that the general scheme of arrangement should be decided on at least one month before the day set for awarding the prizes, and not altered during the month. This last condition was to prevent any one from procuring greenhouse or other plants at the last moment and making a temporary display. There were three judges. The year I was there the judges were the vicar's wife, another lady and the village schoolmaster.

There was a great deal of variety in the different windows, more than one would at first think possible, for the English are natural gardeners. The interest taken was intense, not only by the contestants in each other's windows, as the designs developed, but by all the residents of the town. The window which took the first prize the year I was there, was a study in green and yellow. A number of shelves were fastened across the window inside, and alternate shelves were filled with pots of musk, with its delicate light green leaves and yellow flowers, and pots of lobelia, with dark green foliage and dark blue blossoms. There were enough shelves so that the window was filled solidly full by the day the judges made their tour of inspection, and the effect of the mass of foliage and flowers in the soft gray setting of time-worn stone, of which the cottage was built, was very beautiful.

Possibly there may be such a competition in some country neighborhoods in America, but if so I do not happen to have ever heard of it. It might not be feasible, either, to introduce the custom here, but it seems to me as if at least some modification of it might be attempted with pleasure and profit.

MAX BENNETT THRASHER.



EURYA LATIFOLIA VARIEGATA

THE VARIEGATED-LEAVED EURYA.

AN illustration is presented on this page of *Eurya latifolia variegata*. This plant has a close relationship to the tea plant and, also, the camellia. It is an erect-growing, ever-green shrub with large, long leaves variously edged and blotched with white, making it very ornamental. It is a good greenhouse shrub, its foliage being very attractive mingled with other plants, and, it also serves well for temporary room decoration, or in connection with palms, ferns, dracenas and other stately plants. It thrives in a mixture of loam and peat, or leaf mold, with some sand, and needs ordinary greenhouse temperature, and treatment simi-

lar to the camellia or azalea. It cannot be recommended for ordinary window or room culture, though in an enclosed window it will do well. And an enclosed window is what every plant grower should have who has not a greenhouse or conservatory. By an enclosed window is meant one which is separated from the room by a glazed partition. A bay window is best for enclosing, but even a common window may be so enclosed as to make it valuable as a little plant room, where the humidity and temperature of the air may be properly regulated and the plants kept free from dust. Under such conditions the results of window plant-growing are far more satisfactory.

TWO SPRING-FLOWERING GREEN-HOUSE PLANTS.

TWO very interesting and handsome green-house flowering plants which are usually in their best condition for some time before and after Easter are *Cytisus racemosus* and *Acacia dealbata*. The first is often called *Genista* and the latter *Mimosa* among florists.

grown on for a number of years as a house plant. After blooming it should be shifted into a pot a size larger and some fresh soil given, and, if possible be given the benefit of a well-aired cold-frame for a time to encourage new growth. Later it can be plunged in the open ground, and be regularly watered, and once a week while growing freely be given



CYTISUS RACEMOSUS
GENISTA

Both have yellow flowers, but of very different appearance. The *cytisus* bears in abundance pea-shaped, bright yellow flowers in panicles; the weight of the flower sprays produced at the ends of the branches is apt to bear them down, displaying them in a very graceful manner, and a well-grown plant has thousands of blossoms. It makes a fine window plant when in bloom, and with proper care it may be

some liquid manure. After August this should be stopped and the wood allowed to ripen well before frosts require it to be taken inside. As a window plant it should be in a room without much fire heat. After February a temperature of 65° for a few weeks will bring it into bloom. The ordinary housekeeper would not be apt to give it the necessary care continuously, and on the whole it will be more

satisfactory to purchase a good plant in spring and place it in the window and enjoy it while in bloom, and not attempt to carry it forward.

The so-called Minosa, or *Acacia dealbata* is a small shrub that almost covers itself with light, straw-colored flowers that are clustered

together in little balls presenting a very remarkable and attractive appearance and which is well shown in the engraving. It can be recommended only for greenhouse culture, though for a temporary window plant it is interesting and desirable.



ACACIA DEALBATA
MIMOSA OR SILVER WATTLE

ASTERS.

Gone is the summer, its passion is over,
Gone are the birds with their carols of mirth;
Cold are the breezes, they whisper of winter,
Coming to blight all the verdure of earth.
Yet in the garden the asters are blooming,
The purple and crimson, the pink and the white,
Fairest of crowns for autumn's adorning,
Flooding the place with a halo of light.

Gray are the skies over meadow and mountain,
Brown are the pastures, the stubble is sere,
Yet the brave asters, undaunted, are blending
Wonderful tints, overflowing with cheer.
Hearts that are lonely, or grieving or weary,
Longing for joys that have vanished away,
Look on the asters, and learn from their beauty,
When the world frowns it is best to be gay.

RUTH RAYMOND.

THE AMERICAN POMOLOGICAL SOCIETY.

THE twenty-sixth biennial convention of the American Pomological Society was held at Philadelphia, Sept. 7th and 8th. The morning session was called to order by President Charles Watrous; about 130 delegates were present. These represented twenty-two states. Robert Craig, Vice President of the Pennsylvania Horticultural Society, delivered the address of welcome. Mr. P. J. Berckmans, in his response, referred to previous meetings in Philadelphia, especially that of 1860, to the Philadelphia members whom he had known, and now missed from their places, and to the good work which Philadelphia had done in horticulture in the past.

The president in his address said the future outlook for the society was now better than for several years. The best results will be secured if the society works in accord with the State experiment stations. The work of fruit breeding should be carried on as systematically as stock breeding, and the subject of pollination should be given more attention. Fruits from their own districts are more apt to succeed than those brought from other localities. Before planting for commercial purposes buyers should wait for the experiment stations, and those who can afford to test new varieties of fruits. Our best work should be directed to promoting the production of good fruits for the many. We wish to place them within the reach of all who are willing to work and earn them. We wish to educate the tastes of the people, so the best varieties of fruits will be demanded.

Mr. Thomas Meehan, Germantown, Pa., next delivered an address on "Philadelphia's Contribution to the history of American Pomology." He spoke of the large consumption of fruit in America among all classes. The European farmers who grow fine fruits do not eat them. They must sell them to pay rent and taxes and buy bread. Speaking of the history of grape culture in America, he said some of the first vineyards were planted on the ground where Philadelphia now stands. They found the foreign grapes would not grow well here, and they tried the native grapes, and made wine from them. This led to the efforts to improve the native grapes. First came the grape called Alexandria, and next the Bland. These failed, and were followed by the grape called Susquehanna. This was not desirable, and was followed by the Catawba, which was a great success for a time. Efforts towards

improvement were being constantly made, which resulted in the great standard grape of the present time, the Concord. He also spoke of the great improvement which had been made in pears and other fruits.

Mr. J. H. Hale, South Glastonbury, Conn., next spoke on the subject of "Culture." He said:

I believe in culture, whether it be of men and women, or fine fruits. The growth of culture among the people always makes a demand for more and finer fruit. It is among intelligent people we find the largest market for fine fruits. In the culture of the soil, the most work should be done before planting the crop. First is drainage, then plowing, subsoiling and harrowing. Do not plant a crop until the soil has been given the best culture possible. The implements of culture have been wonderfully improved in the last few years. Own and use the best that are made. I am glad we have the weeds. They are a blessing, for they compel cultivation. I remember many years ago a season of severe drouth. I gave a field of corn frequent cultivation to destroy quack grass which had over-run the field. That year I had the only good corn in my locality, which without doubt was the result of the frequent cultivation given it. In many so-called worn out soils, if trees can be once well established in them, with sufficient culture, good fruit can be raised for many years without fertilizers. My fruit trees on my farm in Georgia were frozen close to the ground last winter. We cut them down, and have given them frequent cultivation for nine months, and the result has been, as it were, a resurrection from the dead. I have a fine growth of new wood to replace the old trees which were frozen. Very frequent stirring the soil on different parts of my farm has made a difference of three dollars per bushel in the price of peaches. Plums were equally profitable when constantly cultivated. When you have a crop growing, stir the soil from start to finish. Not only cultivate the soil, but cultivate men who have ideas.

Question.—Would you cultivate an orchard entirely through the season?

I would cultivate through the growing season until the fruit has matured.

Mr. R. M. Kellogg thought that constant cultivation without adding humus would injure the soil. The peach orchard of Mr. Roland Morrill, Benton Harbor, Mich., was mentioned as showing the benefits of cultivation. This orchard was given thorough cultivation during the growing season, and the only good peaches in that vicinity, were grown in this orchard. His peaches were so fine they sold for five and six dollars per bushel. Mr. Hale said there was less danger from injury to the trees by freezing in winter when the soil was given frequent cultivation during the growing season, and then a cover crop grown, to protect the surface in the winter and to plow under to add humus to the soil the next year.

AFTERNOON SESSION.

The committee on credentials reported 130 delegates present, and the secretary read a letter from Mr. George Ellwanger, who was unable to be present.

Dr. L. O. Howard, U. S. Department of Agri-

culture, Washington, D. C., followed with a paper on "Present Status of Smyrna Fig Culture in California." From his paper we learn that California is now producing very good Smyrna figs, and also that they can be grown by amateurs as far north as Southern New York, but not for commercial purposes. When grown in the north they must be covered during the winter.

Prof. F. A. Waugh, University of Vermont, spoke on "Nomenclature and Systematic Pomology." He said that a confusion of names when buying fruit trees often resulted in great financial loss. Botanists can better study plants if they are classified and named. So in pomology, fruit growers must have the fruits named. These names must be governed by rules; there are two rules that should always govern in plant nomenclature: One is priority of publication. The first name published must always be continued. Again the name should not contain over two words, and it is generally better that only one word should be used. After further discussion of the subject, it was referred to a committee of three, appointed by the chair.

Prof. William R. Lazenby, of Columbus, Ohio, read a paper on "Origin and Development of Buds in certain Fruit Plants."

Prof. J. C. Whitton, Columbia, Mo., followed with a paper on "Relation of Color to the Growth of Flower Buds of the Peach." He said that experiments have shown that a dark colored foliage has greater power to absorb heat than a light colored foliage. These facts have been made use of in economic practice in fruit culture. It has been found that whitewashing the buds would to some extent retard blossoming. Experiments in the greenhouse showed thirty days difference in the time of blossoming between the buds that were whitewashed and those not whitewashed. When whitewashing buds in the spring in the open field, there was less difference between those whitewashed, and those not whitewashed. If light colored buds are covered with a purple, or a light covering, they will absorb more heat, and blossom sooner. Dark colored buds are more apt to endure the cold, and winter



CRIMSON RAMBLER ROSE

Four-year-old plant, ten feet high. A thousand trusses, or 40,000 flowers. Charles E. Mead, Selye Terrace, Rochester, N. Y.

better. One may combine spraying with the Bordeaux mixture, and spraying to whiten the buds, to prevent early blooming.

Prof. William P. Allwood, Virginia Polytechnic Institute, Blacksburg, Va., next delivered an address on "The Technique of Apple Growing in Virginia." He described the kinds of soils that were adapted to apple growing and the varieties which could be best grown on these soils, and the methods of training and cultivation.

An interesting incident of the afternoon session was the presence of S. B. Parsons of Flushing, Long Island, who delivered a brief address. Mr. Parsons is one of the very few persons living, who was present at the organization of the American Pomological Society in New York in 1848.

Nearly 2,000 entries were made in the fruit exhibit, and the result of the award of medals will be given at the conclusion of this report next month.

W. J.

GARDEN ART.

A FINELY illustrated communication by Charles H. Caffin appeared in the September number of *Harper's Magazine*, entitled "Formal Gardens, and a New England Example." This "New England Example," we are told, is that of a "garden which has just been completed for the Hon. Charles F. Sprague at Brookline, Massachusetts, by Mr. Charles A. Platt, the leading exponent of the formal garden in this country." A brief notice of some of the salient points in this article is here presented without entering into a full discussion of the subject or of the fundamental principles of gardening art. The place which in this case forms the "example" consists, apparently, of uneven ground, the residence standing on the brow of an elevation; what is the angle or the extent of the declivity is not mentioned, and, consequently, the reader cannot know whether the terraces on one side and end of the house are actually necessary, or whether a slight rise in the grounds has been purposely taken advantage of in order to introduce the terraces, and the latter inference appears the more probable, in view of all the writer has to say, for in the style of gardening he advocates terraces are desirable features in themselves, and if not required by the nature of the ground surface his art would modify such surface in order to make the terraces possible.

The flower garden lies below the terrace, and is reached by a flight of steps. A ground plan of it is shown, but its dimensions are not stated. Judging from the diagram, apparently it is about 200 feet in length and perhaps sixty-five feet wide, level, and surrounded by a high wall. At the further end of the garden is situated a summer house or casino, which is reached from each side of the garden by a circular colonnade.

The garden is intersected by broad gravel walks dividing it into parallelograms, in the center of each of which is appropriated a circular space for a stone foundation for a piece of statuary or a vase, and statuary and vases apparently occupy some other places. In the writer's language the flower garden is "symmetrically shaped and bounded by walls, balustrades or clipped hedges. The side which gets the sun will probably have its wall brilliant with climbing roses. All round the garden is a border filled with annuals and perennials, whose variety and free growth pleasantly assuage the stiffness of the lines and bound-

aries. The interior space is geometrically divided up into beds edged with trim box borders and separated by smooth gravel paths. The flatness of the effect is relieved by trees in pots, trimmed to shape, or 'pleached,' to use the old English word derived at least from Pliny's time. The beds in their summer bravery of color are contrasted with their green borders and with the light hue of the gravel walks; and the geometrical pattern which all three combine to make exhibits the planning of a human mind and the infinite care and detailed skill of human husbandry."

The writer then goes on to tell about the garden seats and fountain and statuary and other objects. There is also a grove which is intersected by several lines of straight walks.

In a fashion of refreshing simplicity—*näivete*—the writer tells us all about this new example of a garden modeled after old ones, and recommends the style for general adoption, saying that "in seeking inspiration it is only reasonable that we should turn to Italy, where the tradition of the formal garden has been maintained and treated with such refinement. The problem is to adapt these methods to the different climatic and social conditions of America."

Mr. Caffin appears to be a writer who has read up, or has been coached for the occasion, and acts the part of a *plaideur* for this style of gardening, and states his premises, his arguments and conclusions with great frankness, one might almost say freshness, though between the lines one can almost read his distrust of the effect he intends to convey, and even the assurance of his own sincerity. There appears, too, some little guile when he states that the "natural" method of landscape gardening consists in "playing pranks with nature;" and when he makes the quotation in which it is stated that in the natural method the "paths are made to wind about in all directions, and the lawns are not to be left in a broad expanse but dotted about with pampas grass, foreign shrubs, or anything else that will break up the surface;" also in the French quotation which he makes, saying, "Nothing is easier than to design an English park; one has only to make his gardener drunk and then trace his footsteps."

These statements are all false, and the only excuse that can be given for the writer making them, compatible with sincerity, is that he is quite ignorant of the principles of landscape

gardening in the natural style, and that he has been deceived by his coachers! Perhaps he may not thank us for this exercise of charity. "

The writer also informs us that "for nearly two centuries the incoherent affectation of the 'natural' garden has been perpetuated, but a reaction has at last set in. Both in America and in England we are discovering that the house and the garden are logically, sentimentally and practically one. Instead of employing an architect to design the one and a gardener to fumble over the other, we are entrusting both to the architect."

This is the first intimation that has been received of the "reaction." No account of it has yet appeared in the gardening journals of this country or in those of England, France or Germany. In the impressive language of the reporter, Mr. Caffin has got a scoop on this "reaction," and he will be able to enjoy it unmolested, all by himself.

Only the last month were noticed in this journal three new volumes, by as many different writers, treating on landscape gardening, and in these volumes only the slightest reference is made to the formal style of gardening, which peculiar conditions may sometimes make it advisable to adopt.

In view of the long line of eminent landscape gardeners of the past, and the many able practitioners of the present time, in this country and Europe, of the landscape or natural style of gardening; in view of all the literature that has appeared on the subject, and especially in view of all the brilliant examples of the art both in this and the old country, it seems surprising that an intelligent writer can come forward and advise the public to turn its back upon all the beautiful features of natural landscape art and to betake itself again to the straight lines, the box edgings, the numerous gravel paths, the trimmed trees and all the other tiresome and conventional features of the formal garden.

But of one thing our readers may be assured, there is no "reaction" to formal gardening. The owner of this new "example" of formal gardening may enjoy it as a child enjoys a new toy, and his friends and visitors may look upon it with wondering eyes, mouths agape and flattering words, but those who have perceptions of true art, those who have worshiped sincerely at the shrine of nature, will view it only with surprise and repugnance.

C. W. S.

TO THE ROSE MARGARET DICKSON.

O Margaret, Margaret Dickson,
There is sunshine in your smile,
Though in shaded nooks they place you,
That no azure skies beguile;
'Tis the sunshine that you gathered
In your home beyond the sea,
From the suns that shine on Erin
In a golden ecstasy.
All your waxen petals glisten
With the light of Erin's Isle;
O Margaret, Margaret Dickson,
There is sunshine in your smile!

O Margaret, Margaret Dickson,
There is music in your leaves,
When the rain with gleaming arrows
Clouds of lowering shadow cleaves;
On your sprays the drops are striking
Like a far lute's sounding string,
And when your branches rustle,
All the wild wind's pause and sing.
Is it Erin's harp that echoes
Through the somber, mist-wrapped eves?
O Margaret, Margaret Dickson,
There is music in your leaves!

O Margaret, Margaret Dickson,
There are tears upon your cheek,
When the golden rays of morning
Banks of silver dawning streak;
Though your dainty head is tossing
With an air of jaunty pride,
Still the bright drops cling and sparkle,
Which you strive in vain to hide.
When the first red beams of morning
For the trembling dewdrops seek,
O Margaret, Margaret Dickson,
There are tears upon your cheek:—

For Margaret, Margaret Dickson,
There are mem'ries in your heart
That with swift and subtile perfume
On the wand'ing airs upstart—
There's a flag that waves and flutters
From a rocky, castled height,
While in honor of that banner
Float your colors, green and white.
When the roses fair their fragrance
To the summer winds impart,
O Margaret, Margaret Dickson,
There are mem'ries in your heart!

ELSIE E. EGAN.

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* *

BEDS OF CANNAS.

I noted at Louis Menand's (Albany) some really good beds of cannas that were artificially watered, but what a job a large frontage as is here! Egandale is the finest in the collection. One of the grandest effects possible is here shown with a bed of this variety with beds of Souvenir d'Antoine Crozy, Florence Vaughan, President McKinley, Sam Trelease and Bassett's Red. The background, a splendid *Abies glauca* or Colorado Blue Spruce, and *Acer atropurpurea*, presenting a grand color picture both rich and harmonious in its blending.—From "Notes by the Way" in *Florists' Exchange*.

AMONG THE TREES.

Oh ye who love to overhang the springs,
 And stand by running waters, ye whose boughs
 Make beautiful the rocks o'er which they play,
 Who pile with foliage the great hills, and rear
 A paradise upon the lonely plain,
 Trees of the forest, and the open field!
 Have ye no sense of being?

* * * * *

Nay, doubt we not that under the rough rind
 In the green veins of these fair growths of earth,
 There dwells a nature that receives delight
 From all the gentle processes of life,
 And shrinks from loss of being. Dim and faint
 May be the sense of pleasure and of pain,
 As in our dreams; but, haply, real still.

BRYANT.



From a painting by F. Erbel

BEECH WOODS

JOTTINGS.

A few years ago the *Tritoma uvaria* was quite a popular flower, but of late it is seldom seen. Passing a fine place the other day, its desirability as a border plant appeared to advantage. The showy spikes of coral-red flowers, changing to orange, and ultimately to a greenish-yellow, are very striking in a mixed border where there is a background of green foliage. It is one of the most gorgeous of late summer or autumn-flowering plants and should be more generally cultivated.

A charming effect was noted where a few nasturtiums had climbed among the leaves of *Ampelopsis Veitchii* planted along the foundation wall of a house. The glossy leaves formed a beautiful background to the brilliant blossoms.

This morning two fine clumps of *Rudbeckia laciniata flore pleno* (Golden Glow) caught

my eye. They were outlined against an ivy-covered wall newly washed by a grateful rain. The plants are at least seven feet high, and show a mass of golden yellow blossoms. Nothing of recent introduction surpasses the Golden Glow for scenic effect. The flowers are of the same pure yellow tint of the dandelion blossoms, and are borne on long stems, making them fine for cutting. The varieties of double helianthus have been most valuable in our gardens, but the Golden Glow, on account of its greater height, more graceful growth, purer color and longer stems of its flowers, is destined to supersede the sun-flowers.

For the breakfast table, pick a spray of morning glory just at evening and place in a small, dainty glass. The newly opened flowers will seem to greet you with a pleasant "good morning."

F. B.



Go forth under the open sky and list to Nature's teachings.
—Bryant.

OCTOBER WOODS AND WAYSIDES.



Will you come?

These bright clear days with mellow sunshine, though the wind may have an unkind nip, fly all too soon. Early in the month, before Jack Frost

has pinched the burrs, how many flowers may still reward our eager search! Look in the sheltered corners of the post and rail fence. Here you may gather even now golden-rod and asters; two kinds of the latter, the large dark purple, and the smaller pale lilac; the white turtle-head, well named with its curiously shaped flower, purple toad-flax, and messengers from the spring, some belated dandelions.

Who shall say that our bunch lacks gay color when we have added a few leaves of the brilliantly colored sumach? In the woods we shall meet with our best rewards, for here we shall find lingering a few of our choicest friends of summer days.

See, what was that, so dull in color, so like a bit of tree-bark that it almost escaped your eye? Here he comes on the other side, corkscrewing his way up the tree, in his never-ending search for food, the black and white creeping warbler.

Not alone is he, as that clear note echoing through the rustling woods tells us that the yellow warbler is here to keep him company, and the Maryland yellow-throat, also, is not yet daunted by the chill air.

The wood thrush and the hermit thrush, the former with its startled eye peering from some bush, are stopping for a day or two, and we wish that we might hear just a touch of that

melody with which the woods of Canada and Maine have been ringing all summer. Our two finest singers, silver-tongued oracles of the woods, to which shall be yielded the palm?

A dash of scarlet and black and a tardy redstart hurries by, his clear little call-note being one of the few bird notes we hear.

The chewink, a stylish bird, easily told by his coloring of black and white, with dashes of bright chestnut on his sides, is conspicuous as he picks about among the leaves for such worms and larvæ as are to be found.

Curious fungi, orange or brown, stand out from tree trunk or fallen logs. Tiny shelves they seem, and we fall to wondering what woodfolk use them.



HYLA VERSICOLOR—natural size.

Not the squirrels, for they hide their store of nuts in hollow-trees, and out-of-the-way cranies. Not the nut hatch for this bird has the curious habit of setting its favorite nut in the crotch of a tree. What is it then, what tiny brown creature lies in this broad brown one, waved and mottled with white?

It is astonishing what two minutes of absolute silence will do for one in the woods.

If we sit still so long and watch carefully, we shall soon see that little brown bunch suddenly expand, and then a long clear trill. We hear such sounds in the woods all about us, and our little friend lying on the fungus has just added his note. He is the Hyla, a piping frog, who greeted us from a bog last April, and now no longer aquatic, is quite at home among the trees, and will keep the wood musical till November.

Look in the vines growing over your piazza, look in the shrubs upon your lawn, there you will find another of these shrill voiced vocalists. You must look long and well before your eyes finally distinguish him from the greens and browns he is nestled among. It is the *Acris gryllus*.

When does he rest these autumn days? All day long the air is filled with his shrill chirping. Wake in the night and listen,—he is at it still. His fall season may not be long, but he utilizes it.

"There's a little band of singers
Every evening comes and lingers
'Neath the window of my cottage in the trees;
And with dark they raise their voices,
While the gathering night rejoices,
And the leaves join in the chorus with the breeze.
Then the twinkling stars come out
To enjoy the merry rout,
And the squirrels range themselves upon a log.
While the fire flies furnish light,
That they read their notes aright—
The katydid, the cricket and the frog."



ACRIS GRYLLUS—natural size.

Out here in the open we come upon some more birds, and hear the welcome notes of the song sparrow. There he sits upon a black-berry stem, his head uplifted and his little throat swelling with melody. The vesper sparrow rises before us, easily distinguished by his two white tail feathers.

Many spider's webs glisten in the sun, including that large black and yellow fellow's, the tiger of his kind. The cabbage-butterflies are fluttering over the great cabbage fields, thin, pale yellow wings gleaming in the autumn sunshine. After the first sharp frost we shall see them no more. This too, is the month of drifted down, when myriads of seeds are sown by Dame Nature's prodigal hand.

NANNIE MOORE.

AIR-SHIPS THAT FLY.

Possibly no invention of the present day would find such a hearty welcome the world over as a really successful air-ship, one that would carry passengers and freight safely from city to city. Think of the many other advantages such a structure would afford. Is the day insufferably hot? Step into your air-car and in ten minutes be where you may enjoy any temperature as low as you may desire. Does the noise of the neighborhood try your nerves? Mount to heights where not even the chirrup of an insect will disturb you. Nor are there any flies or mosquitoes a half mile overhead. Oh, the delights of the air-ship! when once it is ours.



DANDELION SEED, showing anchor barbes.

But there are successful air-ships that have been in operation for thousands of years, and they are built after many patterns, proving that in even their exploiting that "necessity is the mother of invention." Possibly the first to come to mind is the thistle-down. As the thistle heads ripen, the drying involucre expands and allows the seeds with their copious pappus to crowd out into the warm sunshine, and they are ready to be launched on the first favorable breeze. See them mount aloft, higher and higher, circle on circle, in the glistening sunlight. Will they ever come back? Ah, yes; and a beautiful device have they, too, for the safe return of their little packet of life to earth. You might think that so much hair would insure their permanent entanglement in tree tops and tall weeds, far above the moist ground, which they must reach if the seeds are to germinate. Examine the thistle-down thus caught in weeds, thickets, hedges, and even on wire fences, and the seed will always be found wanting. Now here is a pretty problem: How did the voyager in every case become disengaged from his tangled balloon? Take up a fresh seed with all the means of flight intact and pull off one of the little plumes. Immediately the seed drops. Indeed, a slight strain without actually separating the little plume is sufficient at times to disengage the seed. Now get your magnifying glass and examine the whole structure closely. You will find the little plumes united at their base into a ring which sets in a collar about the top of the seed. The slightest stress on any of the plumes, especially the outer ones, forces the

ring, by a kind of leverage, out of the collar and at once the smooth, hard seed falls to earth.

In the dandelion seed a little tuft is mounted on a slender stem, which enables it to sail away parachute-like. Examine the seed carefully with a glass and you will find it barbed with the points directed upward. Evidently when it settles on a favorable place it will become anchored deeper into the soil with every agitation of the wind and pelting of rain-drops.

The seeds of the milkweed also belong to the parachute class of air-ships. In these, however, the tissue to insure buoyancy is developed about the seeds proper, while in the lettuce, thistle, dandelion, etc., it is a structure on the outside of the ovary, and really represents a modified calyx.

Thus far among man's inventions for navigating the air but two types of machines have been devised, the balloon and the aeroplane. The aeroplane idea is extensively employed in the vegetable world. Possibly the most

interesting example may be found in the fruit of the maple. Observe how the samaras spin about their axes as they fall, thus prolonging their flight and insuring a very slow descent, that the wind may carry them to a considerable distance. The twirling is accomplished by the peculiar curves and setting of the wings. It is not best for the maples to be scattered very far from the parent plant, as in the case of thistles. Because of the slow growth of the trees, which must be continued through many years, proximity of numbers is a



WINGED FRUIT OF
THE MAPLE.

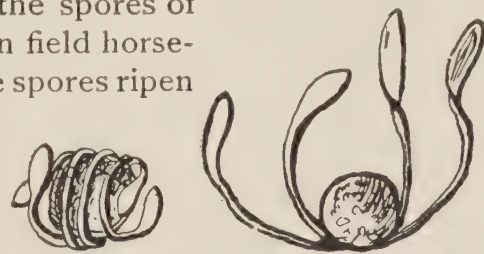
means of protection. In nature, without the fostering care of man, they must grow in groves. So we find the seeds are not constructed for a very extended flight. The same may be said of the elms, the ash, and others of the winged fruit type.

Of the balloon type, the form which man has thus far used to best advantage, we find no true example in the plant world. True, there are many balloon-shaped structures which accomplish wide dissemination of plants, but rather in a secondary way as floats

on water, or as an aid to the tumbling of the plants over the land, as in some ground-cherries.

But the inflation of a sack with a rarified gas is an invention which the wizards of plant economy have not yet hit upon. To offset this, however, we find devices of flight which man has as yet in no way utilized for such purposes. The simplest of these is mere diminutiveness, and we may say it is likewise the most extensively used. What millions of fungus spores, what countless numbers of bacteria are thus borne through the air! Think of it: if a man could only make himself small enough, where might he not go? Not only do the fungus spores travel, but they are carried. When ripe they dry to their minutest capacity, meanwhile voyaging away whither the wind listeth. After a proper period of rest on the bosom of the breeze they grow heavy with moisture, settle to earth, and their journey is over. But nature is as restless as any other inventor. No sooner does she get an idea than she must elaborate it. A wonderful illustration of this is found in the spores of the common field horse-tail. As the spores ripen and dry

out, the outer coat bursts and extends into four ribbon-like



HORSE-TAIL SPORES with arms expanded when dry, and coiled when moist.

arms with spoon-shaped extremities, thus affording greater surface for the winds to catch up the precious packets of life and bear them away. So long as the journey is over dry land there is no thought of giving it up, but the moment the moist air of a bit of bog or swamp is encountered the arms collapse about the spores, and thus shorn of their wings they settle to new abodes to germinate, multiply and perpetuate their race. I know of no more interesting sight under the microscope than to witness how these spore-arms hug about the little spheres when they are gently breathed upon, and then in a moment to see them again commence to expand slowly as they dry.

Besides these air-ships that fly, that have here been mentioned, there are many others, all of which present points of interest for those who will take the trouble to consider them. Nature is full of beautiful devices to accomplish her purposes. E. B. KNERR.



THE CHRISTMAS ROSE.

A correspondent of *The Garden*, Mr. F. W. Burbidge, some months since made some notes in regard to the Christmas Rose, from which the following extracts are made;

"A sure panacea for human woes
Is the beautiful thornless Christmas Rose."—*Punch*.

The legends and folklore of the black Hellebore, or "the rose that blooms in the snow," are many. Thus we are told by the "old masters" in their black-lettered tomes that it first bloomed in Eden, where it was called "the Rose of Affection." When Adam and Eve were driven from the garden delectable they grieved at leaving all the exquisite blossoms of Paradise behind them, and at the hardship of leaving the sunshine for a land covered with frost and snow, and then it was that pitying angels obtained permission to give them the one flower, "the Rose of Love," as a divine token of forbearance and of grace. The peasants of Alsatia have a tradition still that the Christmas Rose—common in their woods and mountains—first bloomed in the snow at the hour of the Nativity, and Grimm's story connecting the rose with the Christ-child is well known.

The black roots or rhizomes of this plant are even still used on the Continent, especially in Germany, for medicinal purposes, though it is quite possible that rustic faith is in reality the main factor of its reputed cures. In Greek times, as is well known, those mentally affected were sent to Anticyra, where the hellebore grew, and even in the time of the early Elizabethan poets, or before, we find Drayton singing, "And melancholy cures by sovereign Hellebore." In old German legends the flower is connected with Hulda, the marriage goddess, but today the Christmas Roses mainly interest us as beautiful garden flowers that are at their best from October, when *H. n. altifolius* begins to bloom, until February, when the later varieties begin to produce their flowers.

Of course we must always remember that all the true Christmas Roses are seedling forms

of *Helleborus niger*, and that they are in no way related, nor will they cross or hybridize with the group of species such as *H. olympicus*, *H. orientalis*, *H. colchicus*, *H. atro-rubens*, *H. abchasicus*, *H. purpurascens* or *torquatus*, *H. lividescens*, *H. guttatus*, etc., now collectively known as Lenten Roses in most good gardens. The Lenten Roses are comparatively very easy to grow and bloom on nearly all soils, provided they be deep and rich and the plants have the necessary shelter as well as shade.

But the true winter Hellebore or Christmas Rose is not so easy to please. It will not actually die off all at once, perhaps, on hot, dry, sandy or limestone soils, but it merely exists on sufferance, or in spite of its surroundings, and rarely attains its fulness of luxuriant leafage and beauty of flower. On deep, rich, alluvial soils overlying sandstone, granite or Cambrian rock it is quite at home. I have seen it do well in black peat, but, like all the Buttercup or *Ranunculus* family, to which it belongs, it likes a rich, moist loam or even a clay soil. It also loves the shelter of a sloping bank or of rocks, either natural or artificial, and during the hot summer it thrives all the better and retains its leaves longer, being in fact a true evergreen, if in a partially shaded position. Like most other mountain plants, it hates the drip of trees, but if it can so be planted outside the drip-line of trees, that will cast a shadow over the nooks in which it grows, say from 11 A. M. till 3 or 4 P. M., so much the better.

Like the Hepatica, it is a true evergreen as grown under the most favorable conditions, and loses in strength and beauty if such conditions are absent, or if they are neutralized by bad treatment in any way.

* * *

CURE FOR PLUM KNOT.—Caustic potash dissolved in water at the rate of one pound to four gallons, and the liquid sprayed on the trees, has proved to be a remedy for black knot.

SOME ROSE NOTES.

Latitude 38° 30'; soil prairie black clay. The directions in the catalogue to "cut back all the shoots or stems" of hardy roses is, I think, very misleading. The severe killing frost forced us to do so last spring, so Lorne, Neyron, Caprice and many others have failed to bloom, though making a fine growth of new wood. Gustave Piganeau gave a few blossoms which were pronounced perfection for a hardy rose. Color a glowing velvet crimson, equal to any picture. It is a very vigorous grower, and we are expecting a fine display next summer. Mrs. Laing is a finely formed pink, though but little if any better than La Reine. Mrs. R. G. S. Crawford is our finest hardy pink rose, and being nearly as perpetual flowering as Dinsmore, is placed with it on our select list. The Ramblers have made a fine growth, but the leaves curl and blister badly under the scorching sun on the south side of the house, so they will be removed to a more shaded locality next fall.

Manda's Triumph and Universal Favorite retain their bright green foliage in the hottest place on the premises. They resemble the Wichuraiana closely, though they have but seven leaflets where the latter has nine. All three of them are creepers, seldom trying to climb unless tied up.

Londonderry revels in the hottest sunshine, so will remain under the south window. Champion of the World seems to be one of the sporting kind, hardly any two plants being alike. Some say it is identical with Mrs. Degraw, some that it is similar to Hermosa, but not so good, while others have given or thrown it away as worthless. Our bush improves with age, and has furnished a few very pretty blossoms. Pink Soupert is not desirable here. A very feeble grower, it does not resemble in foliage or blossom Clotilde Soupert. The La France roses are all desirable, though the striped one has only faint stripes on under side of petals. Augusta Victoria, Mrs. Joseph Schwartz, Marie Van Houtte, Perle des Jardins, Maman Cochet and Princess Bonnie are some of the most desirable on our list. François Dubreuil, though not often mentioned, is with us the finest rich crimson rose that could be desired. That I succeeded in wintering so many safely out of doors encourages me to keep on adding to my list each year. After the experience of last winter I shall try to give all kinds some sort of protection; the so-called hardy ones protection from

the hot sunshine that generally follows the severest frost, and the tender ones sufficient covering to keep the roots from freezing. On my hardy bushes the buds that survived were all on the north side of the stems or branches. My tender roses will each be treated to a mound of dry earth or sand around the stem, then an inverted box or keg and plenty of covering as the cold increases. R.

* * *

THE AMERICAN ROSE SOCIETY.

This society, which was organized in March of the present year, has already gained a large membership, and its prospects are very promising. The officers are as follows: President, Wm. C. Barry, Rochester, N. Y.; Vice-President, Benjamin Dorrance, Dorranceton, Pa.; Treasurer, John N. May, Summit, N. J.; Secretary, Paul M. Pierson, Scarborough, N. Y. The membership was largely increased at the time of the convention of the Society of the American Florists, at Detroit, in August. The society is not intended to be merely a trade organization, but also to be helpful to the amateur grower. Exhibitions are to be held "at such times and places as this society may from time to time decide on." It has been decided to hold two shows in New York City in the spring and summer of 1900. The first during the fourth week of Lent; this will be principally a show for the commercial and private gardener classes. The second show will be held in June, and its principal feature will be exhibits by the amateur classes of outdoor grown roses. The society has enough assurances from intending exhibitors to warrant the success of both exhibitions, and it is their confident belief that these shows will be the best of their kind ever given in this country. Premiums will be offered to exhibitors, and there will be several classes. There will be two commercial classes, one class for private gardeners, and one for amateurs. Members of the society will be eligible to all the exhibitions and will receive all the reports of the society. An Amateur can become an Associate member by the payment of \$1.00 annually. Professional gardeners and rose growers can join as Active Members by the annual payment of \$3.00. The payment of \$50.00 will constitute a Life Member. Those who are interested in rose culture should join this society and enjoy its benefits. The exhibitions will undoubtedly be of a high order. Applications for membership can be made to the secretary.

GARDEN HINTS.

LEAF MOLD.—“I can't have flowers, because I can get no leaf mold.”

Why, *make* it! It is everywhere, only it is waiting to be made!

Save every weed in your yard and garden and pile them in a heap, emptying on the pile the wood ashes from your kitchen stove, being sure to burn in your stove all the bones from your cooking, and on top of all empty your chamber slops every morning, and soon you will have as much “leaf mold” as you want. Wood ashes, chamber slops, burned bones and weeds, with some soil on their roots, will give you fine potting soil for your flowers for the winter and fine manure for summer culture.

Weeds should not be raised in your garden, but if they secure a place there, make them your servants instead of your masters. The compost heap is the proper place for them.

SLIPS.—If a plant is broken I cut it up into slips. The young branches of annuals are the ones which slip most readily. Double balsams, snap dragons, salvias, heliotrope, lantanas, verbenas, nasturtiums, dahlias, portulaca, fuchsias, *Solanum jasminoides*, *Impatiens Sultani*, and even roses and flowering maple will slip if shaded from the hot sun.

I tack a sheet a yard wide on the south side of my shed, and tack a light pole to the other edge and roll the sheet down on little rafters by day and roll it up at night, and for twenty-five cents I have a summer greenhouse, where I raise slips.

WEEDING.—Don't pull up weeds and then leave them on the flower bed or throw them down in the path, for the next rain will make many of them grow again. Always take a basket with you and go “marketing” in the garden every day for weeds, and when you have found one (you may possibly find two or three or more), account that you have found a treasure and consign it to the compost heap. You will soon have no need of investing a fortune in “Bawler's Chemical Fertilizer,” because you will carry on live and enterprising chemical works of your own. My lazy neighbors marvel at the fineness of my potting soil, after I have sifted it, but it is mostly weeds. I make the raising of weeds a *business*. I like weeds. They make grand flowers. Good weeds, like good Indians, are the dead ones.

A \$10 GREENHOUSE.—I dug a hole in the ground four and one-half feet deep, five feet wide and twelve feet long, after I had gone to

the brush pile and prepared frames two feet wide to set up all around the hole I was making. Into these frames I threw the dirt, which made a storm proof wall four and a half feet high at the back and one foot high in front. Nothing but poles, brush and dirt, so far (and a few nails). Over this I set my sash, six and one-half feet by twelve. The north three feet of the hole is the “greenhouse” and the south two feet is the walk. Three feet from the north wall I set a row of posts two and one-half feet high and made a floor of small poles and sticks covered with earth. On this platform I set up steep steps five inches wide and eight inches high, making seven shelves, eighty-four feet in all. On these I put my plants. At the east end of the walk is upright door leading into an entry two and one-half feet square, leading by a flight of steps dug into the ground up into daylight through a cellar door over the steps. One hundred feet of lumber and two boxes of 10 x 12 inch glass built it.

Under the platform I shall put my tender roots and bulbs for safe keeping during the winter, and also start my winter blooming bulbs there. I can take care of two hundred plants in this “dug-out,” for I shall warm it with a stove and steam pipes made from an old radiator, but to those who are not so fortunate, a small stove or a coal oil stove will answer very well. Next spring I may be able to report how my \$10 conservatory behaved during the winter. DR. H. DURHAM.

Shenandoah, Iowa.

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A FEW NOVELTIES.

Every summer I try to procure a few novelties. This year among those that have been especially satisfactory are:

Asters, Daybreak and Purity. Daybreak is certainly the finest pink I have ever seen. Like the carnation of the same name its color is a reflection of the rosy dawn; but color is not its only good quality, its habit is as nearly perfect as the color, stout, stocky and branching; it carries large, perfectly double flowers on such long stems that one may cut freely without sacrificing the buds. Purity is like Daybreak except in color, which is a pure, untinged white. In size, habit and purity of color this is the finest early white I have ever seen.

The new Marguerite carnations are, in every respect, such a great improvement over the



AN ATTRACTIVE BACK YARD

old ones, that the description in the catalogue seems tame compared with my enthusiasm. From one package of seed I raised over fifty plants. These were in bloom eleven weeks from the time the seeds were sown, and they did not get any extra care to force them along, either. The flowers are highly perfumed, and though very full and double, never split the calyx as the perpetual varieties are so apt to do. In spite of the fact that the Marguerite carnations have been in cultivation a number of years, there are still many people who do not know that there are carnations that will bloom in a few weeks from the seed. Many who have seen my carnations this summer at first appear incredulous when told that they have been raised from seed sown a few weeks ago, so closely do they resemble the perpetual carnations; but as soon as they have fairly grasped the fact they exclaim: "Next year I will have a bed of them if they can be raised so easily." While my own thought is, "next year I will have more."

The new morning glory, Rochester, resembles the Japanese varieties in color, size of bloom and foliage, but it is much earlier flowering. My vines commenced to bloom when about eighteen inches high, and show no signs of stopping, though seed has begun to ripen. The color is described as porcelain blue,

edged with white. The flower with its distinct narrow white border, reminds one of the blue and white Wedgewood ware, a shade that is unique among morning glories. Everyone who has tried the Rochester will certainly hope for more colors in this new line.

Though probably not a novelty to many, the pink candytuft is decidedly new to me, though the purple, white and crimson are old friends of mine. In a bed of different colors was one plant of a most beautiful shade of pink, the shade so hard to find outside of the heart of a blush rose, a pink untouched by violet or magenta. I know of no other early flowering annual of this desirable shade of color, and, indeed, a true pink seems a hard shade to find in annuals. I. McROSS.

Wisconsin.

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MAKING THE BACK YARD ATTRACTIVE.

A photograph of a home in Peoria, Illinois, and which has been reproduced, appears on this page, and shows how the back yard may be made attractive. In relation to it the owner writes as follows:

I send you today, under separate cover, a picture, which, if you think worthy, I would be pleased to have you reproduce in the MAGAZINE as an example of what can be done with very little expense to make a small city home attractive. It is a view of our home, Glendale avenue, taken

from the rear, so as to show the rustic arbor. I built the arbor myself with boughs cut in the woods. The vine which almost covers the arbor is a hop. Morning glories help out at two corners.

The arbor has a rustic seat which does not show in the picture, being behind the chair. The hanging chair is a swing for the children. There are hooks for a hammock also, and taken all in all, it is a delightful place on a hot day. The vine at the left is a flowering bean trained the window so as not to cut off either air or light.

* *

GARDEN NOTES.

Last spring I sowed the large and singular looking seeds of a Japanese climber of the squash family, the *Tricosanthes cucumeroides*. This word "tricosanthes," from the Greek, means "hairy flower," and it is well named. The seeds should not be sown in open ground until settled warm weather, then they are as easily managed as cucumbers. The leaves, about six inches wide, are smooth for a plant of the cucumber family, with rounded lobes, and from each leaf a solitary female or a cluster of four or five males arise. The male and female flowers are alike, both having a long, slender tube. They are singular and really pretty, pure white in color, with a horizontal corolla two inches across. First there is a white star of five sharp pointed petals; from the edges of these many long branching hairs arise, making a filmy veil all round it. Sometimes the ends of the hairs roll up, making a flossy border to the flower. I have seen flowers of lace or something that looked very much like them. The plant if touched or broken has a nauseous smell, but the flowers are slightly fragrant. There are some thirty species of *Tricosanthes*; one, the snake cucumber or viper gourd, *T. colubrina*, has orange fruits six feet long. This one of mine was to bear oval fruits or berries of a bright crimson; today, September 3d, the largest fruit is six inches long, running to a sharp point, very different, so far, from the picture; possibly of a different species. Like others of its family it makes a leaf or two, then it stands still for a long time, but once started to run it grows fast. I put a shovel of manure six inches underground as for cucumbers and it seems just as easily grown and transplanted.

Queen Anne's sweet scented pocket melon, *Cucumis Dudaim*, is another plant new to me that I have grown this year. It is closely allied to the musk melons, the fruits being about the size of an orange, of a brown yellow tint with stripes of light yellow and very smooth. Nothing can be more delicious than the smell of this neat little melon, so strong

and sweet a perfume is not found every day. A catalogue description of it mentions it as good to eat, but I don't know about that. The flesh looks like that of a seed cucumber and tastes like a rather poor musk melon. Still, much depends on how such things are ripened and I, perhaps, have not as yet seen a good Queen Anne's melon. It is worth growing for its odor. Musk melons are almost a predestined failure with me, but I think the pocket melon is more easily grown, and it is certainly better than none.

E. S. GILBERT.

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MOLES IN THE GARDEN.

There are frequent inquiries "How to exterminate moles," so I will give my experience. Last year I caught fifteen in our little garden, and thought I had them exterminated, but this spring I found plenty of them seemingly determined to root up all my monthly roses, gladioli, etc. I have already caught fourteen, and think I will have no more for some time. I use the Reddick trap, which I find excellent. When you procure a trap, insist on being shown how to set it correctly, and be very careful not to get your fingers under the prongs, or you may be maimed for life. Now go over the ground, and by raking and tramping obliterate all traces of their work. In a few hours you will probably discover a fresh run heaved up. Approach this carefully so as not to disturb any portion except an inch or two pressed down where you set the trap. If this is properly done you may be pretty sure of him in twenty-four hours or less; but "if at first you don't succeed, try, try again."

After each capture level the ground as before and watch for fresh runs.

For beds of tulips and other bulbs planted in the fall I make a tight fence of pieces of boards or barrel staves driven into the ground eighteen inches or more around the edge of the bed. The boards need not project more than two inches above the surface. Without such protection I would probably have few if any tulips in the spring, for the little pests come long distances to find just such places for winter quarters.

Last winter the thick covering of brush and straw over my monthly roses just suited them and furnished them literally "protection and prosperity." I shall make an effort this year to extend my war against them for a considerable distance on all sides of the garden, but as the country is full of them I suppose some will get in and do some damage.

R.

PRIMULA OBCONICA.

I think that if I could have but one plant for the house it would be *Primula obconica*. It seems to have all the virtues, and I do not know of an objection. It is neat in habit of growth, the foliage is a rich dark green, and no insect foes attack it, so far as my experience goes. The flowers are peculiarly dainty, a little smaller than the Chinese primrose, about the size of a Phlox blossom, with notch in the center of each petal. They are borne crown-like on slender stems, a dozen or more in a cluster, about four or five inches above the leaves. The color is an exquisite pale lavender, changing to white, and the flowers have a delicate perfume quite in keeping with the daintiness of the plant. It is so modest in appearance that it strongly suggests some of our early spring wild flowers, and, like them, it has a little independent air, as if quite aware of its good qualities and attractiveness. Its blooming qualities are unrivalled; it can truthfully be called a perpetual bloomer. I have a plant which has been constantly in blossom for nearly a year, sometimes having a half dozen flower stalks in bloom at once. It is valuable for cutting, as the flowers last a long time and the buds continue to open; the long stems make it capable of use for decoration in many ways.

It likes a rich soil! made light with sand, and good drainage. Give it a moderate amount of water and not too much sunshine. I have found it does well in a north window summer and winter.

F. B.

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THE PRAYING MANTIS.

I was greatly interested in your article on the Mantis, or *Stagmomantis* insect, which appeared in your issue of April last.

The little animal or insect is found in this city every season, but not in any great numbers. It is gray, slightly tinged with brown, and is fully two inches in length. The children catch them and call them "rare horses," from the peculiar way they have of rearing up and stretching out their long necks. Under such circumstances they bring their stout forearms up in front of their heads, much as a pugilist "squares off" for a fight.

But they are quite harmless and soon become very tame, permitting themselves to be handled without fear. They are fond of flies, and will allow the children to feed them, taking the flies in their mouth from the fingers

of the children. I have never seen them farther north than Washington. I do not know how long they would exist if left alone, as they escape or are "worn out" by the handling and die after a day or two.

They are very interesting little fellows, and I was glad to get the full description of them as contained in your MAGAZINE.

Washington, D. C.

SILAS BOYCE.

**LEMOINE'S DEUTZIA.**

The hybrid variety of deutzia known as *Lemoinei*, and of which a full description was given in our pages in a former volume, has since assured its reputation by the exhibition of its sturdy qualities. Without at this time entering upon an extended description, it may be said that it is the result of a cross between *D. gracilis* and *D. parviflora*, and is a low-growing shrub, becoming about three feet in height. It is quite hardy, surpassing in this respect the very popular *D. gracilis*, which is a little tender in most northern localities. The flowers are pure white and are borne in great profusion. The plant can be used as a potting shrub in the greenhouse in the same manner that *D. gracilis* has for years been employed, but it far surpasses in beauty its famous parent. Its profuse blooming habit is well shown in the annexed engraving.

SWEET PEAS.

Many communications have lately appeared in the trade journals in relation to the apparent weakness which some suppose to have developed in the constitution of the sweet pea. Others deny that such a weakness exists, but that seed improperly raised by some growers in order to obtain the greatest quantity at the least expense proves to be deficient in vigor, while that produced by good cultivators is quite satisfactory. These different opinions do not yet find in established facts a basis of reconciliation, consequently the discussion will be apt to continue until all the facts are thoroughly understood. In the meantime those who raise sweet peas should be guided by a few rules that appear to be well founded, which are the following:

The plants should not be raised for two successive seasons on the same ground.

Sweet peas should not be planted on the same ground after culinary peas.

Excessive manuring with stable manure in the row immediately before sowing the seed is not desirable. Ground intended for sweet peas if not left in good condition after taking the last crop will be better for manuring the previous fall rather than at the spring seeding.

The use of artificial fertilizers, the so-called "phosphates," bone meal, nitrate of soda, etc., can be made in spring at the time of planting or soon after.

Thin sowing, by which is meant planting the seeds from four to six inches apart, is conducive to vigor and strength of the plants which come later into bloom, but continue much longer than the plants from thick seeding.

Frequent stirring of the soil with hoe or cultivator in dry weather, thus producing a dust mulch, is preferable to artificial watering, unless irrigating facilities afford opportunities for a regular and abundant supply of water.

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EUPHORBIA (Poinsettia) PULCHERRIMA

One of the showy greenhouse plants in the early part of the winter is the poinsettia bearing the above name. The general treatment of the plant is well indicated in the communication by Sussex to *The Garden*, which is here reproduced:

For bright color the poinsettia has no rival during the Christmas season, and when the weather is mild, as it has been this season, it may be used with advantage either cut or as a pot plant. For the latter purpose, however, it is not all growers who succeed in having plants with good foliage down to the pots. In many instances the plants are propagated too early in the season, and before the time of developing the bright red bracts they have become too tall

and also have lost their foliage, or at least all of the lower leaves, leaving a length of bare stem. I like to commence to propagate as soon as good strong cuttings can be obtained, and then take the tops from these later on. Strong tops taken any time during August will with care root freely. They must be kept quite close where there is good bottom-heat. Either a hotbed or the stove propagating pit will answer, but at the season when the fires are not kept up it is perhaps better to rely on a hotbed. Shading is essential until the cuttings have taken root, and I should mention that as the strong tops are hollow between the joints, they must be cut quite close below a joint. These late-struck plants should be kept in heat throughout, but must be as close to the glass as possible and exposed to all the sunshine. As soon as the bracts are beginning to develop, manure may be used freely. It is only where careful treatment can be given that these late cuttings succeed. Those propagated early may be grown in pits, or during the summer they may be placed in a sheltered, sunny position. They will show no sign of losing the foliage if left out until the nights get cold, but they will when placed in heat lose nearly all their leaves and the bracts will not develop properly. As soon as they begin to show color the more heat and light that can be given the better, and after they are well developed they may be gradually hardened off. When cut they should have the base of the stem dipped in nearly boiling water, which will drive the sap up and prevent bleeding. Thus treated, they will last in a room for several weeks, even longer than on the plants, unless the temperature falls to freezing.

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LOBELIA CARDINALIS.

The *Lobelia cardinalis*, or Cardinal Flower, is the most showy of our native plants. Its rich, cardinal-red shade is extremely rare in flowers; in fact, we can recall no other wild flower of the same gorgeous hue. Though growing naturally in rather wet spots, it takes kindly to cultivation and will grow and blossom very satisfactorily in almost any location, particularly if it is where a dash of water can be given it once in a while. It begins to blossom in July, and the long spikes of brilliant flowers will continue opening to the very tip, lasting until the latter part of August.

Numerous side shoots spring out from the main stalk and lengthen the time of flowering, and these little sprays mixed with some fern fronds are lovely for table decoration.

The plant can be raised successfully from seed, but will not bloom until the second year. With us, while not common, it is sufficiently plenty that roots can always be obtained if you know where to go for them. I have found that after the seeds have ripened the flower stalk withers and in the fall a new growth starts, forming a little green rosette of leaves, and this is the best time for transplanting.

This summer I found a plant with pure pink blossoms growing in the midst of hundreds of the typical colored flowers. I thought it a rare find, as I had never seen or heard of any such before. Later I found that one of the same color was growing in a bed of seedlings at Highland Park.

F. B.

FRUIT NOTES

DISPLAY OF MELONS.

A very fine exhibit of melons was made by James Vick's Sons at their seed house in this city, September 16th to 19th. The appearance of the fruits was fine, and tasting them revealed high quality in many varieties, but a critical and true comparison of them in this respect would be difficult if not impossible to give. Having so many varieties together, however, gave an excellent opportunity to note their characteristics of form, color and size, and these are given below:

MUSK MELONS.

GREEN FLESHED.

Long or Oval.

Acme, or Baltimore Market, long, medium.
 Bay View, long, medium.
 Champion Market, oval, small to medium.
 Columbia, oval, medium.
 Melrose, medium.
 Rocky Ford, oval, small.

Round or Flattened.

Cosmopolitan, medium.
 Extra Early Hackensack, medium.
 Jenny Lind, small.
 Montreal Market, large.
 Netted Gem, small.
 Pacific Gem, large.
 Prolific Nutmeg, medium.
 Skillman's Fine Netted, medium.
 White Japan, small to medium.

YELLOW FLESHED.

Long or Oval.

Grand Rapids, medium to large.
 Paul Rose, small.

Round or Flattened.

Banquet, small to medium.
 Golden Netted Gem, flattened, medium.
 Irondequoit, large.
 Osage, medium.
 Surprise, medium to large.

WATER MELONS.

Long or Long Oval.

Dixie, color light with dark streaks.
 Georgia Rattlesnake, light with dark streaks.
 Mammoth Ironclad, light with dark streaks.
 McIver's Wonderful, light with dark streaks.
 Strawberry, light with fine, dark network.
 Sweet Siberian, dark with darker, fine network.

Round or Roundish Oval.

Black Spanish, dark.
 Hungarian Honey, light.
 Ice Cream, light.
 Jumbo, dark with faint light streaks on the shaded or under side.
 Sweetheart, light.
 Vick's Early, dark.

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AN ORCHARD OF BOSCH PEARS.

A late number of the *Rural New Yorker* describes and gives an illustration of an orchard of Bosch pears containing 100 trees, these having been formed by grafting the

Bosc on Sheldon trees, thus securing straight and vigorous stocks. This orchard is the property of Mr. W. A. Bassette, of Seneca County, N. Y. In regard to the use of the Sheldon as a stock, Mr. Bassette makes the following remark: "Although I have no cause for complaint in the growth my trees have made thus far, were I to set another Bosch orchard I would use the Kieffer as a stock tree." An illustration of such a tree is given showing a strong, straight stem with an ample growth of Bosch head.

A correspondent of Newbern, Virginia, in the same journal, writes as follows:

The Bosch is a grand variety here in every way, being a reliable and productive bearer, of the largest size and highest quality. I notice that the Rogers Nursery Co. and Mr. Powell are budding it on Kieffer in order to secure a more vigorous growth. It remains to be seen whether this will do. I have had it grafted on Le Conte, which is a more vigorous grower here than the Kieffer, but after growing finely for a few years, it seems to kill the stocks, or, at any rate, they die. For me it makes as rapid a growth as is desirable on European stocks.

This warning in regard to the use of Kieffer as a stock for a moderate growing variety like the Bosch, is timely, and, moreover, accords with some other experiments of a similar character. There is apparently a repression of the vigor of the stock that in time impairs its vitality. A strong, straight grower like the Buffam would undoubtedly make an excellent stock on which to work the Bosch.

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CHRONOLOGY OF MR. BURBANK'S VARIETIES.

The following statements are condensed from a report published in the Pacific Rural Press:

1874—The Burbank potato was raised from seed of Early Rose and introduced by J. J. H. Gregory.

1887—Introduced to the general trade the imported Japanese plums Botan, Chabot, Long Fruit, Masu, Botan No. 2.

1888—Introduced plums Burbank, Satsuma, and ten other varieties under numbers as received from his collector in Japan. Buds were secured from the whole lot and some of them have been named Berckmans, Blood (4), Hunn (1), Maru, Willard, etc.

1893—Mr. Burbank began to raise seedling plants and crossbred seedlings, and in 1893 introduced Giant, a shipping prune. The plums called Splendor, Golden, Delaware, Shipper and Juicy were purchased from him and introduced by other parties.

The same year Mr. Burbank introduced his

hybrid walnuts Royal and Paradox and the new quince sent out as the Child's. The Hale plum was purchased by J. H. Hale and introduced by him in 1895. The Van Deman quince was purchased and introduced by the Stark Brothers Co.

1895—Wixson and Giant plums were offered in 1893, but introduced to the general trade two years later (1894-95).

1898—In 1898 he put out the following new fruits: The plums called Apple, America and Chalco, and prune Pearl.

October Purple plum was purchased by Hoyt's Sons, who introduced it to the general trade in 1898.

1899—Climax, Sultan, Bartlett and Shiro plums (hybrids), and Sugar prune and Pine-apple quince.

Ornamentals—Since 1876 Mr. Burbank has introduced five new roses, three cannas, numerous gladioli, lilies, tigridias, myrtles, callas, berries and trees, fruits and flowers, too numerous to mention.

Chestnuts—Three new Japan seedling chestnuts were introduced under the names of Coe, McFarland and Hale.

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THE ANJOU PEAR IN VIRGINIA.

Although the American Pomological Society indicates the whole of Virginia with two stars (the highest mark) to show the adaptability of the Anjou pear to that region, a correspondent of the *Rural New Yorker*, H. L. W., of Newbern, Va., writes that journal in this way: "Anjou, which is a great variety with you is utterly worthless here, and I should say, anywhere in Virginia. It is so tender in blossom that I have never had a crop on trees twenty years old. Occasionally there have been a few scattering pears. The fruit is fine, but what of that, if we never get any?"

* *

THE CHARLTON GRAPE.

Our townsman, Mr. John Charlton, the nurseryman, has a new variety of grape, which is attractive and interesting. Mr. Charlton fertilized the Brighton grape with pollen from the Mills. From a seed resulting from this cross he raised the variety in question. The plant is a strong grower with thick foliage. It has been fruiting for several years. It is a red grape, berries medium to large size, clusters large shouldered, quite compact. Skin thin but firm, flesh tender with no pulp, juicy, sweet, aromatic, seeds separating from the flesh with-

out effort, juice containing a high percentage of sugar. Fruit ripens after the Brighton and with or soon after the Delaware and before the Concord. This variety is very promising, at least for garden culture. How it will prove in vineyard culture, or stand shipping are points not yet determined. It has been named "Charlton" by Mr. Van Deman, but it has not yet been propagated for sale. Last year it was exhibited at the American Institute, New York, where it received a diploma. This season it was shown at the convention of the American Pomological Society, Philadelphia, and there received a Wilder medal. Both Mr. Charlton and the public may be congratulated on account of this new acquisition.

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CAMPBELL'S EARLY GRAPE.

On a visit to Mr. Charlton's grounds on the 16th of September we found Campbell's Early Grape quite ripe, and the quality of this new variety is very satisfactory. But we were surprised to see that its bunches were very straggling, reminding us of that good, old variety Creveling, the fruit of which is excellent, but whose few scattering berries on the stem make it utterly worthless for market. Now, the question is whether this feature presented by Campbell's Early in this instance, is usual with this variety or whether it is, for some cause, peculiar to Mr. Charlton's grounds. We hope to hear from our readers who have tested Campbell's Early about the size, shape and compactness of its clusters. It has been sent out as a very desirable market variety, but if the clusters are thin and straggling it will be worthless for market.

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THE HARDY PRIVET.—Nearly all varieties of the privet are usually hardy in most parts of this country, but last winter was an exceptional one, and the several varieties at Humboldt Park, Chicago, were severely tested, and according to a report of the superintendent, the only kinds which stood the test were *Ligustrum medium*, *L. brachystachium*, *L. Stauntoni*, *L. Japonicum* and *L. Ibota*. Those which were either killed or frozen back were *Ligustrum vulgare*, *L. laurifolium*, *L. ovalifolium*, *L. glaucum albo-marginato*, *L. vulgare meto albo*, *L. ovalifolium tricolor* (variegatum) and *L. Walkeri*. From various reports it appears that *Ligustrum Ibota* is one of the hardiest kinds, and it will be apt to come into more general use.



BUD, BLOOM & SEED POD.

*Nearer to the river's trembling edge
There grew broad flag flowers, purple, pranked with white,
And starry river-buds among the sedge,
And floating water lilies, broad and bright.*

—Shelley.

Repair the walks.
High feeding for pansies.
Hard frosts do beets no good.
Do you lift the tardy tuberose?
No compromise with the late weeds.
Chrysanthemum buds should be thinned.
New York city uses 40,000 rosebuds daily.
Do not sow lawn grass seed after October first.

A pot of mignonette comes in nicely in the spring. Sow now.

One advantage of autumn tree planting is that there is more time at this season.

Prune blackberries closely. You will notice that the best fruiting is on the young, not the old branches.

The bloom from October planted bulbs is a little better than that from November planted. Have the better bloom.

What a first class asparagus bed needs, is a three-inch coat of rich manure every year. This is the time to apply it.

A double benefit. Your neighbor would thank you for introducing the MAGAZINE to his or her notice. We thank you in advance for the kindness.

Many persons never have fine beds of Dutch bulbs simply because they do not bring themselves to the easy but necessary task of fall planting. Such neglect is inexcusable.

Thousands of spring-planted cut-leaved birches die every year, because these trees are poorly adapted to spring planting. Set them in the fall and ninety per cent. of them would live.

If you contemplate a hotbed next spring, it is well to make some provision ahead, as early as this fall. One provision is to collect soil of good loamy quality—decayed turf well enriched is the best. It should be covered to prevent deep freezing, although if the outer part be frozen it will be a benefit. Another is, see that you have a site that is well drained and well protected. If there is no other shelter, a tight board fence eight or ten feet high will answer. Such a fence if required, can be better erected with much less labor when

there is no frost in the ground. The same is true of laying drain tile and that is why we speak of the matter now.

Forestry on the Farm. The writer is an enthusiast on the increased planting of forest trees by farmers and others. This is the case for several seasons. First with increased forests there is less injury done by insects, because forests encourage birds, the natural enemies of insects, and forests prevent insects from moving rapidly over great stretches of country. The writer also recognizes the benefits of trees in breaking the force of storms, thus lessening the power of the cold on man and beast in winter, and also the comfort which trees impart by their shade in summer. Then there is the arboreal beauty contributed to a landscape, making man's existence a greater delight; and trees, besides, impart increased value to lands, as well as yield value in their wood and lumber. The writer has another reason for being an enthusiast along this line. It is for the pleasure he has found in growing forest trees, and it is to throw some light on this aspect of the case that he sets forth his own experience as follows: Nine years ago he started several plantations of forest trees along one side of his small farm, intending to give to the same decent treatment for inducing free growth. What he calls decent treatment is to prepare the soil and give cultivation somewhat approximating that which he would give to a field of potatoes, rather under than over. The plantation was lengthwise of his grounds and but a rod and a half wide, so with horse and cultivator the going over the plots was soon done. Now, as to results for the nine years, there are figures that astonish many. It will be noticed that the beginning was made mostly with small trees. American elm grew from three feet to eighteen feet in height with a circumference of thirteen and one-half inches one foot above the ground; silver-leaved maple from three feet to twenty-five feet in height; white birch from three feet to twenty-eight feet in height; walnut from one year old to a height of fourteen feet. Bolle's poplar from

one year old to a height of twenty-seven feet; Norway spruce from eighteen inches to fifteen feet; white pine from one foot to fifteen feet; larch (European) from two feet to twenty-one feet and so on. The planting was done mainly eight by ten or ten by ten feet apart. This plantation is watched with admiration by many persons. Is not such a record grounds for enthusiasm? Such results or near to them are possible to every land owner. October is a good planting time in this part of the country and much of the north.

E. A. L.

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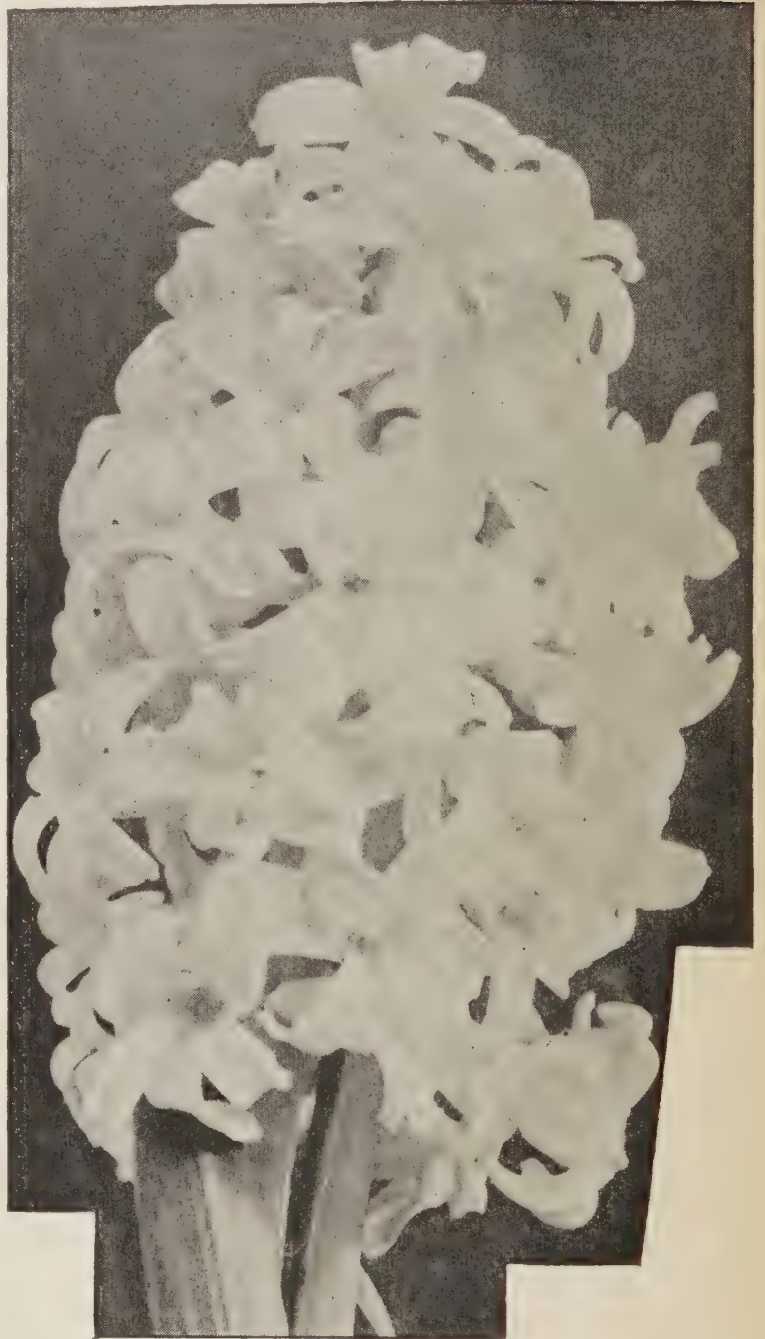
SEED PODS.

A tiny bit of flower insurance is every plump brown Holland bulb tucked cozily into the mellow earth this fall.

A small Clematis Jackmanni planted in an unfavorable situation a year ago, and neglected all through the ensuing season we have this year coddled considerably and it has surprised us by almost perpetual bloom from June through August. The *petite* vine is yet not much larger than a knitting needle, and we looped it about over a small trellis thinking to winter it close to the ground this year and train it up high next spring. Often times the low trellis has been one rich mass of royal purple bloom.

With reference to the hardiness of opuntias, discussed in this magazine not long ago, I am glad to quote E. G. Fowler's note to another magazine a year or two ago. Mr. Fowler lives in Port Jervis, New York, and he says; "Last summer in strolling over mountain sides about my home, I found fine specimens of *Opuntia Rafinesque* growing in the shelving and loose rocks. There seemed to be no soil for the roots, nothing but stone. The pretty flower is yellow with a dark red center. I believe this is about the farthest north that this cactus is found growing." Mr. William Falconer in replying to this note said: "*O. Rafinesque* is quite hardy in our gardens and grows well in cultivation; in fact it is not only a very much neglected plant, but a member of an undeservedly neglected race. There are several distinct varieties of it, *O. comanchica* being one of the finest, *O. vulgaris* also does well in the garden, but our experience with these hardy opuntias is that *O. Missouriensis* makes the finest show." From *O. vulgaris* I have seen westerners pick the reddish fruits, peel them, and eat them with evident relish.

The wreaths of fluffy white clematis seed



HYACINTH LA DÉESE—reduced.

vessels now curling like puffs of smoke over low bushes along our creeks are quite as pretty as flowers and more picturesque. Here and there the scarlet flame of a cardinal flower flashes upward through the gray, misty wreaths overhanging the water, suggesting one of the finest combinations possible for planting grounds with water running through them. An objection sometimes made to planting this pretty Clematis Virginiana in dooryards is that it seeds so freely as in time to become a pest. The objection might hold if the seeds were known to produce many plants; but they do not. Very few of them seem to come up except in loose, light, sandy soil, such as one finds along the banks of creeks where the plants grow naturally.

Ellwanger is right in saying that the Japanese anemones are to autumn what the daffodils are

EASTER HYACINTHS
REDUCED.

to spring. Glorious, indeed, have been their rich masses of great creamy cups, the very life of the border in October. With us, too, they promise to last well into November, though the long drouth of midsummer was very hard upon them. A hard, dry, clay soil does not seem to suit this anemone.

There are a number of "reasons why" autumn is surely the best season for transplanting. Among shrubberies and flower borders it is much easier to judge now, where to plant new things than when the other plants have died down, and no "landmarks" are left to show where they grew, as is the case in very early spring,—the rival season for transplanting. Besides, there is such a rush of garden work in spring that it is not easy to plant so carefully, or always to remember the many small items of transplanting that there is leisure for noting in fall. The sooner, too, that a fine tree, shrub, or flower is planted the sooner will it add beauty to our grounds. Why wait till spring when the best of seasons for transplanting is already here? Even a fine specimen perennial often requires years to develop into fullest beauty. "Plant *something* every year, and plant too thick rather than too thin, for the former evil is more easily remedied than the latter. The older we grow, if we really love our gardens, the more tastes will

develop, and the more we may regret leaving unplanted a tree, shrub, or perennial in some place it might have adorned."

Single hyacinths are undoubtedly the finest of all for house culture, and there must always be plenty of white ones to "harmonize" the grouping of different shades in pink and blue. La Déese, whose picture I present this month, is the handsomest white hyacinth I ever grew, and the bulb is sure to give at least one rich, heavy spike of flowers, frequently two of them.

A useful object lesson may be learned by comparing its grand spike with those in the group of Easter hyacinths. These are from second-size mixed bulbs, and while the spikes were of fair size and good color, they suffered very much in comparison with the flowers from large bulbs in named collections.

However, the small bulbs, if planted in the garden, will grow larger yearly, giving finer flowers each year until they reach quite large girth, then they will split up into a number of small bulbs, giving few if any flowers until they reach a good blooming size again.

The large bulbs usually give their finest flowers the first year after we plant them, the splitting taking place the second. So the best way is to buy the large bulbs for house culture, the small ones (named) for planting in the garden.

L. GREENLEE.

LETTER BOX.

Let me have audience for a word or two.
—Shakespeare.

Transplanting Pinks and Lilies.

- 1.—When is the proper time to transplant May pinks?
2.—Also, when should lilies be reset? A. F.
Miamisburg, Ohio.

1.—It is safer to move pinks in April.
2.—Lilies can best be transplanted in October or November, or *Lilium candidum* can even be moved the last of August or in September, but if not then, they may yet be moved this month.

* *

Trimming Shade Trees.

Will some one please tell me through the Letter Box what month is the best to trim Carolina poplar shade trees. Also the sugar maple tree? Mrs. A. J.
Pleasant City, O.

These trees do not need trimming unless the heads have been started too low and greater height of stem is need. In that case the lower shoots or branches can be taken off any time after the leaves have fallen.

* *

Club-Root of Cabbage.

Please give me, through your MAGAZINE, a remedy for large lumps on the roots of cabbages. F. K.
Yonkers, N. Y.

The club-root of cabbage is caused by a fungus. When it has once appeared, cabbage should not again be planted on the same ground for some years, but on a new piece. A heavy dressing of quicklime will help to destroy the fungus, and it is always best to dress land with quicklime that has once had a crop of cabbage affected with club-root, before planting the same crop again.

* *

Wintering Caladiums and Cannas.

Several inquiries have been received in relation to wintering cannas and *Caladium esculentum*.

When frosts have come and injured the foliage of these plants they can be lifted, and if some soil clings to them it need not be removed. After digging, set them away for two or three days in a dry, shady, airy place, in order that they may lose part of their moisture. Then pack them away in shallow boxes with sand or dry soil, keeping them in the cellar where the temperature will not be apt to go much below 45°. By March it is time to take them out and pot them, giving them a start before planting-out time.

Clematis paniculata Not Fragrant.

I would like to know why a *Clematis paniculata* that covers my piazza emits no fragrance. Are there two kinds? There is one growing in this vicinity so fragrant the odor is observable at a considerable distance. If there are two kinds, can the one I have be grafted, as it is too large and elegant to be discarded? H. H. T.

Somerville, Mass.

It is possible in propagating *Clematis paniculata* from seed, and most of the plants sold by the trade have been so raised, that some of them are lacking to some extent, or wholly, in fragrance. There are always variations of some kinds among seedlings, and it would not be surprising to find specimens of this clematis without fragrance. It is doubtful that it would be practical to graft the plant mentioned.

This case shows that it will be necessary for nurserymen and plant growers to propagate this plant by cuttings from fragrant stock, if the pleasing quality of fragrance is to be certainly retained, and buyers should ask for plants with fragrant flowers.

* *

Evergreen Trees.—Plants for Cemetery.

Will you kindly give me information in regard to propagating evergreen trees. We have a lot of them in our yard, but there are no small ones, and I do not find out how to start any, if it can be done from them. There seems to be some difference in the foliage of some of them, but most of them bear large quantities of little bluish berries. Would these be the best in a cemetery; if not, what would you recommend? It gets hot and dry quite often through the middle of the summer. Where should they be set, in the cemetery? and what else would you recommend for a mass of flowers and close foliage that will best endure heat and dry? I especially love roses, and wish there was a kind that would bloom and flourish under these conditions. I will be grateful for any information you may give.

Case Springs, Kansas.

Mrs. M. H. W.

The evergreens referred to are probably *Juniperus Virginiana* or red cedar, which we know thrives very well in most parts of Kansas. The propagation of this plant from seeds is somewhat difficult, and the young plants are of quite slow growth the first few years. For these reasons we cannot advise an amateur to undertake raising them in that manner. It will cost less to buy a hundred young plants from one who makes a business of raising them, or dealing in them, than it would cost to raise from seed a single one by an amateur.

A plant of this kind in a cemetery would not be inappropriate, but there should not be

many of them near each other. Roses are not specially adapted to cemetery use, as insects and drought soon despoil them. Better depend on some of the herbaceous plants, such as the white Day lily and some varieties of perennial phlox and other low-growing plants that are suited to the locality and climate.

* *

Tuberous Begonias.—Easter Lily. —Tuberose.

1.—Will you tell me how to take care of tuberous begonias, or if they will bloom in winter and be good house plants?

2.—Will an Easter lily be a good house plant for winter?

3.—Please tell me how to treat a tuberose.

Momence, Ills.

A. G.

1.—Begonia tubers can be kept during winter in soil or sand nearly dry and in a temperature of 50° to 60°. About the first of March pot them and give them a warm place and water and start them to grow.

2.—The Easter lily can be raised in the house in winter if it is kept in a temperature sufficiently cool, say from 50° to 60°, and the lower figure is preferable. It should be in a room secure from frost, but with no direct fire-heat—a room, for instance, that receives what heat it has from an adjoining room.

3.—The tuberose cannot be advised as a winter house plant, on the contrary, keep the tuber dry and warm—temperature of 60° to 70°—until ready to start it to grow in the spring.

* *

Rambler Rose.—Nitrate of Soda.

1.—Are the Rambler roses and climbing roses as much troubled with rose enemies as other varieties are? If so, how are they managed when trained up pillars and the sides of buildings? Surely they cannot receive the thorough treatment given to the low-growing kinds.

2.—Please tell me how to use nitrate of soda. Last spring I sent away and got some. Although "explicit directions for use" were promised they were so meagre I had to experiment. I thought I was cautious, but learned one thing not to do it again. I got afraid of the stuff and concluded to learn about it from some other quarter. Please tell me what you think of it, what is it good for and how to use it, and accept my thanks for your kindness. Miss E. C. B.

Clayton, N. Y.

1.—In our own experience we have not had so much trouble with insects on the Rambler roses as on most other varieties. This experience may not, however, be general. Climbing roses trained on pillars and walls are quite as easily sprayed with liquids as are the lower growing varieties. All that is needed for the purpose is a good garden syringe.

2.—Nitrate of soda is a very excellent fertilizer to use, especially early in the season, but it must be employed with care, and not too

great an amount be given to the plants. About 200 or 300 pounds of nitrate of soda to the acre can be used for most garden vegetables, such as potatoes, cabbage, cauliflower and celery. For the potatoes it can be scattered on the ground along the rows and afterwards the cultivator can be run along, working it into the soil; in a small garden the rake may be used. For early cabbage, scatter the nitrate over the ground and work it in just before setting the plants; for late cabbage, place a little on each side of the plants and afterwards work it in. Of course, careful calculation must be made in regard to the quantity for each plant or along a row, and the proper quantity for each plant or given space should be nicely weighed, and then the amount when ascertained can be quickly measured out.

Usually when nitrate of soda is employed, it is found advisable, also, to sow some form of potash salts and some superphosphate. How much of all or any of these fertilizers may profitably be used depends on the condition of the soil, and can be determined only by experiment.

* *

The Otaheite and the Oonshiu Orange.

Your MAGAZINE is always very interesting, and as you wish it of course to be equally reliable in its information, I would like to ask a question. Is it or is it not a fact that the Japanese seedless Oonshiu orange is not sometimes mistaken for the Otaheite orange? I think it must be, for the descriptions given of the latter seem to apply to the former. When the Otaheite plants first became popular the fruit was generally spoken of as no good, but the plant from its prettiness when laden with its golden balls, gave much pleasure. On page 125, June number, I read that the fruit was "very sweet and had no seeds." Now, that is a characteristic of so few oranges that I think the "Mandarin Oonshiu" of Japan, which is quite seedless, must be meant. I know that many are being propagated in pots for table ornaments, and they are indeed fit to stand on the table of a millionaire. I ship thousands yearly only for orchard planting, but I have a few as ornaments and the fruit is delicious.

H. E. AMOORE.

Kobe, Japan.

There is probably some similarity between the varieties here in question. The fruit of both is of small size, but undoubtedly there is a difference in the growth of the plants, presuming the account given in "Thomas' Fruit Culture of the Satsuma" is correct. The Satsuma and Oonshiu, or Unshiu, are said to be identical. The engraving here presented of the fruit of the Oonshiu, and which was prepared from a photograph received from Mr. Amore, shows it to be distinctly flattened. This marks it strongly as something different from the Otaheite, the fruit of which is quite round. The Otaheite has now been widely disseminated in this country, and it might



JAPANESE SEEDLESS ORANGE, OONSHIU.

almost be said that one specimen, or more, could be found in every village, and even in every hamlet, and everywhere, so far as heard from, the plants are the genuine Otaheite. By the by, this variety is not a new one in this country, but has lately become very popular. The writer remembers seeing it more than forty years since, and how much longer it has been here it would, perhaps, be difficult to learn.

From what our correspondent writes it appears that the Unshiu may yet become a desirable rival of the popular Otaheite as a house plant, and it is not unlikely that its fruit may be of better quality than that of the latter.

* *

Tomatoes in the Garden.

H. C. L., Wake Forest College, N. C., asks about the best method of staking tomatoes and removing side shoots or suckers. Also, why plants of some good varieties give smooth fruits, yet those of others from the same seed are rough and unshapely. Also, if several varieties are planted together, whether they will "mix." Also, which is "the best all-round tomato for the home garden?"

Tomato plants to give the best results should have some support. This is not given them in field culture, nor in gardens where it is not necessary to economize space, but for a few plants a much larger number of fruits can be secured by means of proper support. This is done in various ways, and any way that effects the purpose may be adopted. A simple way is to set a pole or stake by the side of the plant and fasten the plant to it. Some encircle the plant with a hoop, which is supported by three or four stakes, some make a low frame-work of poles

supported by stakes, the poles running along each side of the row of plants.

By removing some of the lower side-shoots or pinching them out as they first form, it is claimed that larger and finer fruits can be obtained. The advantage of this course cannot be very great.

The equilibrium of a variety of tomato is not very stable, and more or less difference may be observed in every plant of each variety, hence some give fruits near to the normal character of the variety, while those of others may be widely variant.

If different varieties of tomatoes are planted near each other undoubtedly they will "mix," but this mixture may be seen but little, even if noticeable, in the fruit; to a greater degree the seed may be affected.

As to the last question, no decided answer can be given. There are so many good varieties that no one can say which is the best.

* *

The Blue Columbine.

I wish every lover of wild flowers could take a trip to Colorado in July or perhaps the latter part of June. I am a lover of wild flowers but I never—certainly never—could imagine any looking more beautiful than they did there. I have especially in mind the state flower Columbine, a large, blooming plant growing about eighteen inches in height; the flowers of cream and royal purple; a more striking flower would be difficult to find. We have the small variety in our woods in red and yellow, with their long trumpets containing at the extremity the drop of honey. How often, as a child, I have watched the bumblebees extract this. But these large ones of the west, grow so abundantly, and flower so profusely, lasting so many weeks, that I longed to take every friend there during their reign, and reign is the only word; for every one loves them—every one gathers the wild ones who can, and most of the people who own a plot of ground large enough, transplant them and thus enjoy their companionship for a month or six weeks of perpetual beauty.

I recall one pretty home situated on Eureka street, Central City, Colorado. The streets in a mountain city are about the width of our alleys and built on but one side. They overlook the back yards of their neighbor; whose house fronting on the next street is so much lower, that the former could set on the top of the latter. Frequently, there are homes fortunate enough to have a front yard of green grass. This is terraced, the first about six feet lower than the door, to be reached by a flight of steps, the next about six feet below this. The little house to which I refer, was painted white with a tiny white fence; within, close to the house, grew and bloomed hundreds of this royal purple columbine, with a foreground of soft green; the little fence standing on a rocky terrace, then another row of the columbine and another strip of green sod. This place, but one of many, was worth driving ten miles over the mountains to see. *I wonder that this beautiful flower has not been brought east, for while it might not grow as luxuriantly or bloom as profusely, surely, the gardener, would not miss the possession if he could obtain it. F. F.

* Both the purple, really blue, and yellow Colorado Columbines have been in garden cultivation throughout the whole country for many years. In seed catalogues they will be found under their botanical names, *Aquilegia cœrulea* and *A. chrysantha*.—ED.

FAMILY COZY CORNER.

Some said, "John, print it"; others said "Not so."
Some said "It might do good"; others said "No."

—Bunyan.

The Cold of Last Winter.

This missionary association (World's Faith Missionary Association) has twenty-four departments with superintendents at the head of each. I am the florist and have about 20,000 flowers in bloom. I did not have any success with the small bulbs, that I procured last fall, but I propose to try it again. Even the bulbs that were accounted hardy, failed to make any showing. Winter aconite, colchicum, ixias, triteleias, crocus, chionodoxas, Gesneriana tulips, made no showing whatever. We had some chilly weather here last winter. Even my Crimson Rambler and Wichuriana roses died, and almost all of my roses indeed, whether protected or not.

Even trumpet vines died. I do not know of any hardy roses for such a winter as that of 1898 and 1899.

Iowa.

DR. H. DURHAM.

* *

The Columbian Raspberry.

The Columbian Raspberry has for some years borne a most excellent reputation for health and vigor of growth, great productiveness and superior quality of fruit. It is also classed as very hardy. People of the Northwest are apt to shrug their shoulders and remark when reading of hardy fruits in eastern catalogues. A native New Yorker, I know that the abundant snows of that section, lying for months, afford a root protection not found in the West. Light snowfalls, with alternate freezing and thawing, added to high winds that are by no means "a gentle wind of western birth," put all plants and fruits classed as hardy, to the severest test. Yet, it remained for the Columbian raspberry to pass unharmed through the coldest winter on record in western Iowa. The unprecedented severity and its long duration wrought havoc with nursery stock, fruit and ornamental trees, and shrubs, that went into the winter unprotected, to an extent heretofore unknown. The spring preceding, being tempted by the many points of excellence ascribed to this raspberry, yet with little faith in its hardiness for this section, I ordered two trial plants. They were fine specimens, and were planted alongside the "Older"—the iron-clad black cap of the Iowa Agricultural College, and given good culture. Owing to a heavy snow that fell in late October, they went into the winter without the mulch which it is our custom to give even our hardiest plants. They were not even laid down as we had intended. A barberry hedge bordering the north side of our grounds as a windbreak, was all that could be termed a protection. This snow was followed by alternate freezing and thawing, with stretches of days termed "singe-ers" in western parlance. At different periods, the mercury ambled down to 34 and 36 degrees below zero, and the earth became adamant. When spring opened, we found to our surprise, that our young Columbians were in as perfect condition as the established "iron-clads"; roots unharmed, and canes perfectly sound and leafing out to their very tips. They have sent up immense, thrifty canes bending under the weight of their handsome, bright green foliage, besides yielding a fine crop of their handsome berries. These are large, conical, a rich purplish red, seeds few and small, the pulp rich and juicy with a fine distinctive flavor, slightly acid, and without a trace of the musky flavor so much disliked by many. They were loaded with fruit, under the over-spreading new growth, before it occurred to us to examine them; much of it was dead ripe, and to our great surprise, none was lying on the ground, and as we jostled the branches in picking, *none fell to the ground*; neither did they crush or crumble under the touch. Because of its firmness, it is a most valuable berry for shipping, fine for canning on account of this quality in addition to its choice

flavor and color. Its fruiting season, which began early in July, has just closed, August 7th, hastened somewhat by a week of most excessive heat and dryness.

The Columbian is easily propagated by throwing a shovelful of earth on the tips when the season is dry; when rainy, this is unnecessary. Spring is the best time for planting in cold localities, setting plants three by four feet for garden culture, three by seven for field. Keep the soil well stirred, and in garden culture, mulch when dry weather sets in. When new canes are a foot in height, pinch off the ends. This renders them stocky and self-supporting, a valuable consideration, besides furnishing an abundance of fruit bearing wood, insuring heavy crops. A heavy mulch, applied before the fruiting season begins, means finer fruit and more of it.

I will add, that the blackberries, and these of the hardiest sorts, were killed, root and branch, some in same locality, others in a more favorable one. MRS. A. H. HAZLETT.

* *

Flowers for a Dry Summer.

This dry summer has truly emphasized the value of hardy perennial flowers. Most of my annuals have dried up long ago despite copious sprinkling but now, August 14, Rudbeckia Golden Glow is lighting up the shrubbery border with borrowed sunshine. Nearby is a large clump of white perennial phlox. Platycodon grandiflorum is doing well, too, and a clump of salmon pink perennial phlox has been in bloom for two months.

My canna bed is gorgeous now but has had liberal wettings, but a bed of four-o'clocks (all colors) has bloomed for two months without any.

Several of my lilies succumbed to the drought although mulched, but the irises, gladioli and dahlias are staunch and true. Lilium tigrinum splendens has been best, but one plant of auratum, and one of præcox and one of candidum turned yellow and died down without blooming. A Bermuda Easter lily stood the winter out doors and bloomed for me beautifully this spring.

I give my speciosums dirt from under an old house and such stalks of bloom! Leichtlinii bloomed very well for so small a bulb, but a bulb of Krameri rotted during the wet weather last winter. My superbums were splendid, but the prettiest of all was a pure white, dainty, waxy wild lily sent me from Oregon. I wonder what its name can be, for now-a-days there's a great deal in a name.

Talk of a bog for Japanese irises,—mine bloomed beautifully this dry summer—on a hill top too. One, a pure white, was as large as two hands with fingers extended, and there were purple ones of every shade.

"What a splendid fellow Grand Duke Alexis is." "Who are you talking of?" asked a friend. "That large pinkish-white dahlia." "Ah! yes," but I like the pompons best.

"How do you keep your dahlia roots?" "I let Mother Earth keep them for me. I cut down the stalk when dead in the fall and make a mound of manure from the stables over it. I tried a Milk and Wine Lily bulb this same way last winter but failed with it. I've known canna roots to be kept this way, but not last winter."

"Do things ever bloom as they do in the catalogues?" asked a skeptical friend.

"Come see my bed of torenias." "O how pretty! They are one mass of blue and white. How do you make them bloom so?" "A rich bed and plenty of water and sunshine." And my bed of fancy-leafed coleus. I am prouder of that than anything. I think the sun brings out richer colors in every new leaf. See, I pinch out the bloom buds, and the side branches spread out and the plants grow handsomer. But these must be watered, too, while it is so dry.

North Carolina.

M. M. Y.

EDITOR'S NOTES

Vick's Magazine Third Series.

VICK'S MAGAZINE appears this month in a new form and with some new features, adding very much, it is believed, to its appearance and usefulness. The business relations of the MAGAZINE have also undergone a complete change by entirely severing its connection with the seed business, and being issued by the Vick Publishing Company, entirely independent from any other business.

All of these changes, it is thought, will materially conduce to the usefulness of the publication and the interests of its readers who will, no doubt, appreciate them at their real value, and whose expressions of approval or criticism, are desired. The support and confidence extended to this MAGAZINE in the past is a guaranty of value for the future, and we expect to have the number of our readers largely increased.

The MAGAZINE will each month contain the most reliable information on subjects of interest to every one who cultivates a garden, or even raises window plants. These subjects will embrace the care of the lawn and ornamental trees and shrubs, flowering and foliage plants, garden vegetables and small fruits, orchard fruits and the interests related thereto, and Nature Studies for young people.

In advising our friends of our objects and desires, we wish, also, to secure their personal cooperation in enlarging the circulation of the MAGAZINE. If what we are doing meets your approval may we not ask that you will say a word to your neighbors, and thus assist in extending and deepening the refining influences of horticulture, that they may reach every portion of our fair land and produce a visible effect on every landscape, brighten every home and carry increased cheer and contentment.

The editors also hope to receive from the readers of the MAGAZINE any short statements of interest on garden subjects, and photographs of plants, flowers and scenes. Those who will kindly send such pictures, with an explanatory word or two in relation to them will secure our thanks and confer a favor to the public. The editors expect the MAGAZINE to be given a hearty welcome in the homes of all its present readers, and with their help to be introduced to thousands of others.

* *

Revised Fruit Catalogue.

The Division of Pomology of the U. S. Department of Agriculture has just issued as Bulletin No. 8 a revised catalogue of fruits. It consists of those varieties of fruits recommended by the American Pomological Society for cultivation in the various sections of the United States and British Provinces. As heretofore this revision has been made by a regularly appointed committee of the American Pomological Society, of which Prof. W. H. Ragan is chairman, and Mr. T. T. Lyon, Prof. E. J. Wickson, Prof. C. S. Crandall, Mr. Silas Wilson, and Mr. L. A. Berckmans are members. This is an exceedingly valuable publication for consultation, especially by those intending to plant new varieties of fruits. In any locality a fruit-grower should first inform himself in regard to what has been done in that line by its residents, and the next best source of information is this publication; as the committee say, in reference to the catalogue, "no planter should attempt to follow its markings absolutely, but should rely rather largely upon the experience of others and a correct knowledge of his own location and environments within the district."

* *

Garden Art.

A communication from Mr. William Webster, landscape gardener, reviewing some features of Mr. Caffin's article on "Formal Gardens" which appeared in *Harper's Magazine* for September, will be published in our next number. It was unavoidably omitted this month for want of space.

With regret we here note the death, September 5th, of Alfred Henderson, who for the past nine years has been the head of the great seed and plant establishment of Peter Henderson & Co., New York. The subject of this notice was the eldest son of the late Peter Henderson. He was born in Jersey City, in 1852 and after completing his education was trained in the plant and seed business in his father's establishment. In the conduct of the business to which he succeeded, he worthily followed in the footsteps of his father and strengthened the foundations which had already been laid. Until the disease developed to which he became a victim, he was a great worker, and was greatly beloved by his employees to whom he was a true friend. He was a very agreeable man and popular with all those customers with whom he came in contact. Mr. Henderson was a great reader, a graceful writer, and contributed to some extent to the horticultural press. He leaves a widow and four sons, one of whom bears the name of Peter, in honor of his grandfather, the founder of the great plant and seed establishment. The funeral was attended by many persons connected with the seed and nursery trade, and others. Many floral tokens were sent as expressions of esteem. Interment was made at Greenwood cemetery.

* *

Henry L. de Vilmorin.

By the death of Henry L. de Vilmorin on the 23d of August last, at the age of fifty-six years, France and the world lose one of the most brilliant horticulturists of the present time. The subject of this notice was the head of the old and great seed establishment of Paris, Vilmorin-Andrieux et Cie. Such was his activity, his ability, and the wealth of his continuous contributions to all departments of agriculture, that his death at this time is a severe blow not only to the commercial house with which he was connected, and not only to France, but to the world at large. In its notice of his death the *Revue Horticole* says: "Worthy inheritor of a name which has made French agriculture and horticulture illustrious for four generations, chief of the celebrated and popular house, Vilmorin-Andrieux et Cie, a man of high intellectual culture and of great worth, Henry de Vilmorin will leave the most durable remembrance among all those who have known him, and who today deplore his premature loss." To tell what he has done would be to write almost a history of French agriculture and horticulture for the past twenty-five years. He will long be remembered for the improvements he made in varieties of wheat, potatoes and sugar beets, and for his voluminous writings on nearly every branch of horticulture, each of which he has permanently enriched by exact statements of research, experience and critical observations.

* *

On the 17th of August last, at Sawbridgeworth, England, in the 79th year of his age, occurred the death of one of the most prominent of English horticulturists, T. Francis Rivers. The name of Rivers, of Sawbridgeworth, has been a familiar one during the greater portion of this century, father and son having been famous in their efforts for the advancement especially of fruit culture and rose culture. Thomas Rivers, the father had acquired a great reputation long before his death which occurred in 1877. Francis Rivers had been the head of the great nursery establishment at Sawbridgeworth since 1872, and in the conduct of it had become highly esteemed. But his fame has been firmly established by originating many new and valuable fruits, among which are some of the most valuable varieties of nectarines, plums, cherries, peaches, pears and apples. Most of these fruits are particularly well adapted to the climatic conditions and cultural methods of England, but some of them have already taken a high place in this country, especially the Czar, Monarch and Grand Duke plums. The name of Rivers will always remain an honored one in the annals of horticulture.

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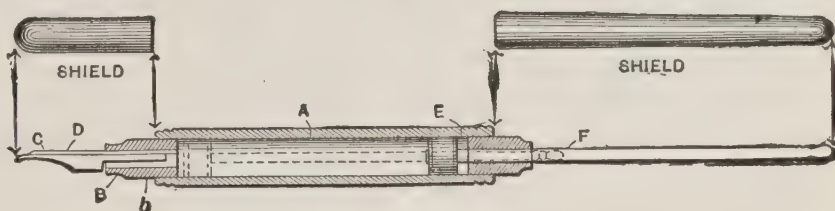
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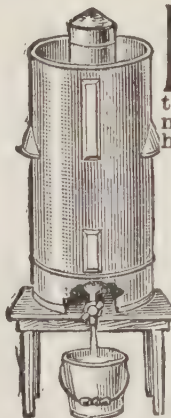


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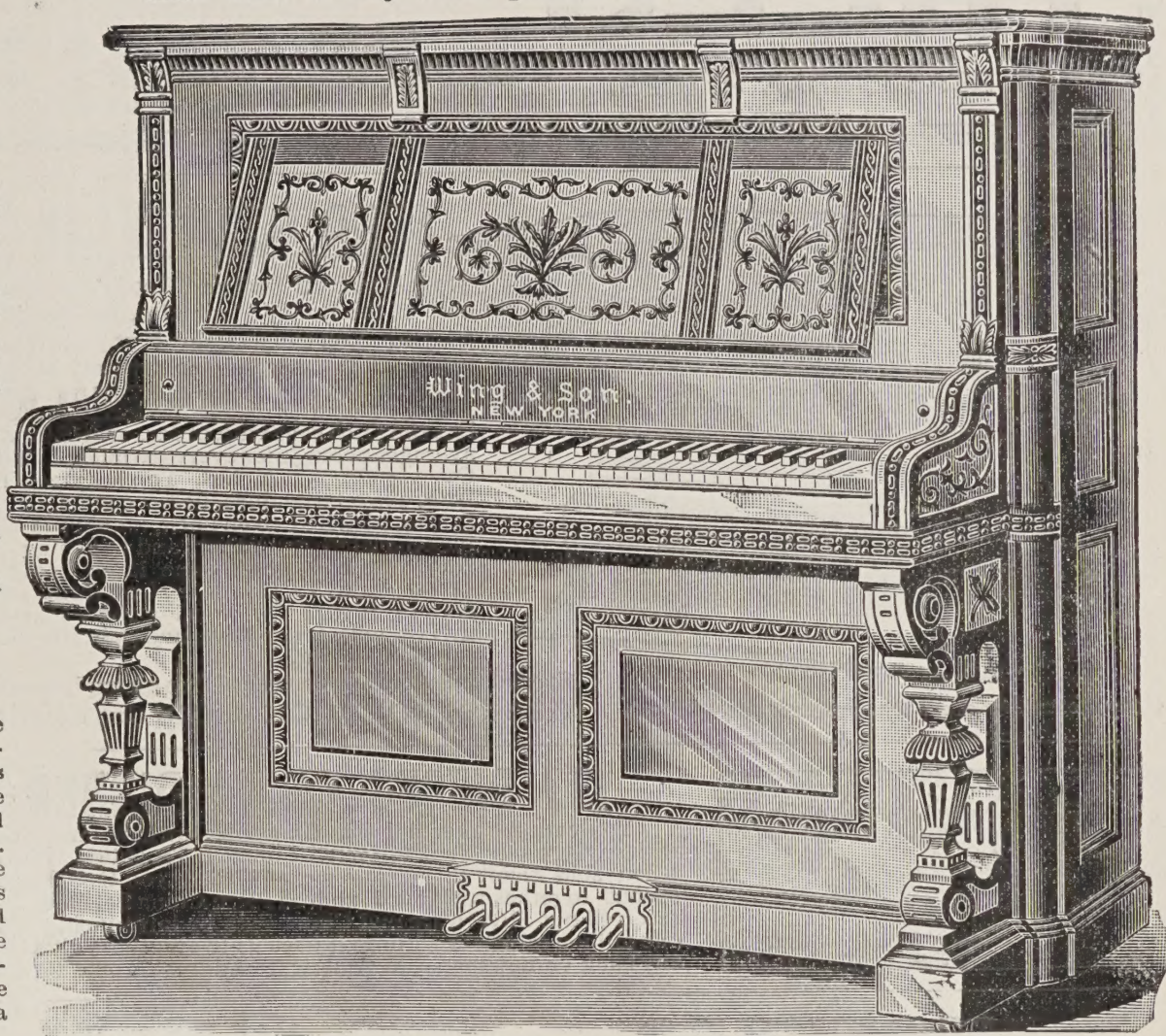
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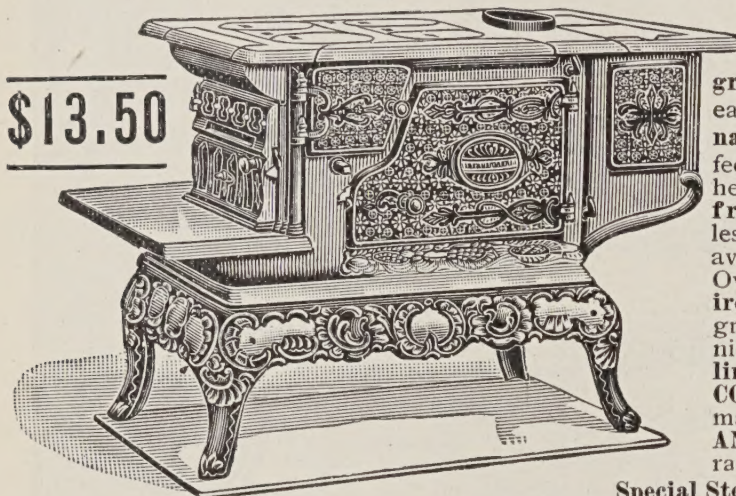
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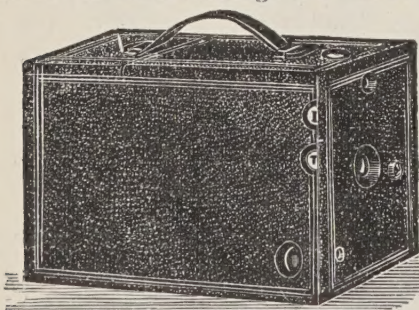
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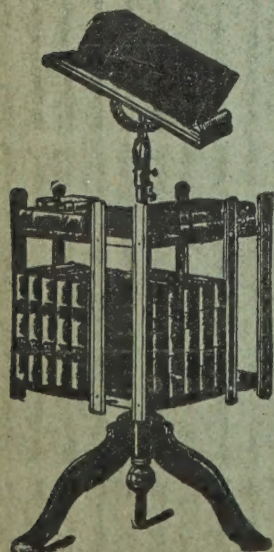
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